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THE JOURNAL OF CUTANEOUS DISEASES

VOL. XXXVI—No. 11 NOVEMBER, 1918 WHOLE No. 432

Original Communications

DERMATITIS HERPETIFORMIS: ITS ETIOLOGY AND RELATIONSHIP TO CERTAIN MEMBERS OF THE BULLOUS GROUP OF DISEASES, ESPECIALLY TO ERYTHEMA MULTIFORME AND TO PEMPHIGUS

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Although the history of dermatitis herpetiformis as a well-defined and generally recognized morbid entity properly begins with the classic writings of Duhring, certain forms of cutaneous disease which had been long before described by various writers, especially the French, under various names as distinct and separate affections, may be readily recognized at the present time as belonging to this malady; and among these is the affection which, distinguished by a vesicular and bullous eruption resembling herpes in many of its features, was described by Bazin under the name arthritic hydroa.

ETIOLOGIC FACTORS

Gouty Diathesis.—As the qualifying adjective indicates, this author regarded arthritic hydroa as a manifestation of the gouty diathesis, and declared it was seen only in those who had symptoms of gout. The gouty nature of this affection was not accepted by subsequent writers; indeed, I have not been able to find any author who agreed with Bazin.

Nervous Origin.—Tilbury Fox, commenting on hydroa, asserted his belief that "the nervous system must be directly concerned in the production of the eruption as it occurred essentially in the overworked, the fagged, the depressed and the excited."

Later, Crocker asserted that his experience did not lend much support to Bazin's opinion as to its gouty character, but he was inclined to agree with Tilbury Fox that nervous exhaustion was at least a predisposing, if not a direct, cause in many instances. Indeed, until a comparatively recent period the nervous origin of all forms of derma-

titis herpetiformis was generally accepted and is even yet regarded by many writers as extremely probable.

Brocq, to whose tireless industry we owe much of our present knowledge concerning all forms of the malady, writing elaborately and at length, in 1888, regarded it as well established that the nervous system plays some rôle in the mechanism of the production of the cutaneous phenomena, although he, at the same time, admitted our ignorance as to whether the rôle of the nervous system is a primary one or only secondary to the action of micro-organisms or some leukomain. In support of the view that the nervous system plays an important, if not the chief, rôle in the production of the malady he states that quasi-neuralgic symptoms frequently precede or accompany the eruption; that patients frequently have a history of nervousness either personally or in one or other of the parents, and that the eruption usually presents more or less symmetry in its distribution and arrangement. He reports a number of cases to illustrate the influence of the derangement of the nervous system in its causation of which the following may be taken as examples: One patient was a pianiste who had been fatigued by overwork and was very nervous in consequence; another chewed tobacco excessively and was a chronic masturbator, and had a brother who had some kind of nervous disease; a third was an epileptic and had a sister who was very nervous; in four cases the eruption had followed violent emotional disturbance, once after sudden terror and in three after a fit of violent rage.

Elliot has likewise reported two cases in which the disease followed the shock produced by sudden death in the family of the patient; in one instance the eruption appeared almost immediately and in the other after a few days. I think it must be agreed, however, that the evidence afforded by cases such as the foregoing is far from conclusive and lacks much of the preciseness necessary to establish scientific facts.

Duhring in his unfortunately never completed treatise on "Cutaneous Medicine," which may be regarded as containing his mature views on the subject, expresses the opinion that "the disease is due to various causes, some of which are obscure in their origin and seat, but that the nervous system is directly responsible for the cutaneous manifestations."

Lesions in Central Nervous System.—In a few instances lesions of the central nervous system have been found in connection with eruptive symptoms which bore more or less resemblance to dermatitis herpetiformis. Bristowe observed a case of caries of the upper dorsal vertebrae accompanied by a circinate erythematous and vesicobullous eruption confined to the upper portion of the trunk and the upper extremities, with severe generalized itching. Meier has also reported

a case of eruptive disease presenting the symptoms of dermatitis herpetiformis, in which pathologic alterations in the nerve branches and the cord were found. It is only proper to add, however, that in neither of these cases was the diagnosis of the cutaneous affection beyond question.

Pregnancy.—Much emphasis has been laid on the occurrence of a particular form, herpes gestationis, during pregnancy, as supporting the theory of its nervous origin. As is well known, symptoms referable to disturbance of the nervous system are very common during gestation, and it is concluded that the cutaneous symptoms are due to this disturbance; but it scarcely need be pointed out that the relationship between pregnancy and the nervous and cutaneous disorders is capable of being explained in quite another manner. There is little or no doubt that the nervous symptoms are due to a toxemia which is so frequently present during pregnancy and the cutaneous symptoms are probably of like origin.

Glycosuria.—Some years ago Winfield reported a small series of cases (four) in which glycosuria was present, and he regarded this association as affording additional proof of the neurotic character of the disease; but this association may readily be accounted for in a number of ways without invoking the aid of the nervous system since glycosuria is by no means always the result of nervous derangement.

COMMENT

While there can be but little doubt that a large share in the production of the eruptive phenomena of dermatitis herpetiformis belongs to the nervous system, it is far from certain that, as many authors assert, the primary cause resides in it. In recent years we have learned much concerning certain organic substances of complex composition produced by putrefactive processes, errors of metabolism, and by growth of pathogenic bacteria which produce more or less decided toxic effects on the various tissues and organs of the body; and, in some instances, these toxic effects on the skin are capable of ready demonstration. There is a constantly increasing amount of evidence that many if not all of the members of the group of diseases characterized by a bulious eruption as the chief cutaneous symptom, are due to such toxins; and the view that dermatitis herpetiformis is primarily a toxemia has gained many adherents in the past decade or two, some of those even who still adhere to the theory of its nervous origin admitting the possibility of a primary toxemia. Hyde, in the last edition of his well known treatise, after enumerating a number of possible causes relating to the nervous system remarked: "It is possible the irritation of the nervous system may be due in every case to a toxemia."

INFLUENCE OF TOXEMIA

One of the most strikingly suggestive facts pointing to the probable toxic nature of the malady is the occasional occurrence of eruptions presenting all the features of dermatitis herpetiformis after the ingestion of drugs, a number of such instances having been recorded by reliable observers in recent years. Danlos has observed an erythematous and vesicobullous eruption follow the administration of potassium iodid accompanied by intense pruritus, which continued to appear for six weeks after the suspension of the drug. Leredde, who studied this case microscopically, found a marked eosinophilia and numerous eosinophils in the fluid contents of the blebs, and was of the opinion that it was a true case of dermatitis herpetiformis.

Balzer and Sevestre have reported a case of acute mercurial intoxication resulting from inunctions which was followed almost immediately by an erythemato-bullous dermatitis beginning in the groins and axillae, spreading later to the anterior portion of the trunk and the scalp; the eruption was accompanied by stomatitis and albuminuria. At the end of a month, when recovery seemed about complete, a new outbreak appeared, characterized by erythematous plaques on which bullae developed, occupying the whole body. Similar attacks continued to appear at short intervals for two years, each attack being preceded by a marked diminution in the quantity of urine excreted and accompanied by a moderate eosinophilia.

MacLeod has also reported a case due to mercury in a boy, age 5 years, who had taken a large dose (9 grains) of mercury-with-chalk. The day following an eruption consisting of circinate groups of papulovesicles appeared in the lumbar and adjoining regions. The first attack lasted about three weeks; this was followed by an intermission of a fortnight when a new attack appeared, lasting about five months.

Tenneson has observed a case which followed the administration of salicylate of soda. The disease began as an urticaria which after two weeks was replaced by a vesicular eruption which displayed the features and followed the course of dermatitis herpetiformis. Some time later an acute exacerbation was produced by a second administration of the drug.

Admitting that there may be two opinions concerning the exact place to be given these cases, although they have been reported by skilled observers with large experience, they nevertheless demonstrate in the most conclusive way that an eruptive disease presenting the symptoms and pursuing the course characteristic of dermatitis herpetiformis may be produced by toxic substances reaching the circulation by way of the gastro-intestinal canal or, as in one of the cases reported, by way of the skin itself.

In a few instances the affection has been observed in those suffering from a toxemia arising from the absorption of bacterial toxins from some localized focus, that is, it had its origin in a focal infection; and in some the toxic character of the eruption was strikingly demonstrated by its disappearance when the focus of infection was removed. Bogrow has reported a remarkable case of this kind. A woman with cancer of the uterus accompanied by a foul vaginal discharge also suffered from a cutaneous affection presenting the symptoms of dermatitis herpetiformis. The eruption began to show signs of improvement when a disinfecting douche was employed and disappeared abruptly when the necrotic mass was removed surgically.

POSTVACCINAL ERUPTIONS

Reference may be made here to certain cases of postvaccinal eruption which have been reported at various times by a number of observers as examples of dermatitis herpetiformis following vaccination (Dyer, Pusey, Bowen and Stelwagon). Bowen, commenting on the nature of the cases which he observed, says: "It is not improbable that a toxin developed by the vaccination in certain predisposed individuals is responsible for the cutaneous appearances." He at the same time admits that the relationship of these eruptions to dermatitis herpetiformis may be disputed. Whatever differences of opinion may exist among dermatologists as to the proper place of these eruptions there is general agreement that they are of toxic nature.

RELATIONSHIP OF AUTOINTOXICATION

It is a well known fact that practically identical eruptions may be produced by different toxic substances. As a familiar example we may refer to urticaria which may arise from the ingestion of such diverse substances as fruit (the strawberry), shell-fish and drugs; and it is quite possible, indeed extremely probable, that the symptoms of dermatitis herpetiformis may be produced by a number of toxic substances—not only those which arise from bacterial activity, but those which may result from errors of metabolism. A few years ago Johnston, whose too early death we have to deplore, studying the relationship of autointoxication to various bullous diseases, including dermatitis herpetiformis, concluded that it was the principal etiologic factor in their production and that it was due to a failure of proteid metabolism. More recently Schwartz, in a most painstaking study of the metabolism of prurigo and dermatitis herpetiformis, comes to the conclusion that these two diseases are manifestations of anaphylaxis. These studies of Johnston and Schwartz, which deserve the most careful consideration, would seem to indicate that the toxemia which produces dermatitis herpetiformis may have its origin, or at least its preliminary stages, in the alimentary canal. Johnston called attention

to the fact that shock, which as already observed, has preceded the appearance of the affection in a number of instances, a fact which has been made much of by those who believe in its nervous origin, shows its effects nowhere more strikingly than in the gastro-intestinal system, where by interfering with the normal processes of metabolism, it leads to the production of toxins of various kinds.

LABORATORY STUDIES

In connection with the possible origin of the toxemia in the gastro-intestinal canal, brief reference may be made here to some studies of dermatitis herpetiformis now in progress in the research laboratory of the Department of Dermatology of the University of Pennsylvania. Dr. Weidman, the assistant director of the laboratory, studying four typical cases of the vesicular and bullous variety which have been under the author's observation for periods varying from two to ten years, has found a yeast, the Blastocystis, constantly present in the feces. Since this organism is not normally present in the feces, this finding is suggestive of some possible relationship to the disease, although no trustworthy conclusion can be drawn at present, owing to the incompleteness of the investigation and the small number of cases thus far studied.

CAREFUL DIFFERENTIATION NECESSARY

In the character, arrangement and distribution of its eruptive lesions and to a less degree, in its course, dermatitis herpetiformis frequently shows a more or less marked resemblance to certain members of the group of bullous diseases and especially to erythema multiforme and to pemphigus. This resemblance was certain to receive the attention of so careful and experienced an observer as Duhring, and in a paper dealing with this resemblance he wrote: "The two diseases that bear most likeness to dermatitis herpetiformis are erythema multiforme and pemphigus. Dermatitis herpetiformis possesses clinical features common to both, but it is more closely related to erythema multiforme than to pemphigus . . . it is, in most instances, more closely allied to erythema multiforme than to any other generally recognized disease;" he regarded these two affections as "allied in nature." The resemblance between the eruptions of these two diseases is at times very close. In every dermatological clinic cases appear from time to time concerning which one must be in doubt at the first examination whether he has to do with an erythema multiforme or a first attack of dermatitis herpetiformis.

RELATIONSHIP OF DERMATITIS HERPETIFORMIS TO PEMPHIGUS

The relationship of these two dermatoses has been the subject of much discussion. For a time it seemed as if the term pemphigus was

about to become obsolete and all the cases formerly designated by it were to be classified as examples of the bullous variety of dermatitis herpetiformis. Our French confrères were especially active in this respect, particularly Brocq, who has been indefatigable in the study of the malady. But pemphigus still properly holds a place, although a considerably restricted one, in dermatological nosology. There are certain cases of cutaneous disease characterized by a bullous eruption exhibiting none of the polymorphism so characteristic of dermatitis herpetiformis, to which the term pemphigus is still applicable.

Frequency of Eosinophilia

Just here I wish to say a few words concerning the relative frequency of eosinophilia in these two maladies. My own observations lead me to believe that it is much less frequent in dermatitis herpetiformis than in pemphigus; in the former it is frequently absent altogether, while in the latter it is the rule, the percentage of eosinophils at times being very high.

Peculiar Grouping Arrangement Overemphasized as Diagnostic Sign

Much emphasis has been placed by the great majority of writers on the tendency of the eruption of dermatitis herpetiformis to occur in groups, often with an annular arrangement as a highly characteristic feature. Duhring himself especially emphasized this feature declaring that, "without herpetiformity, it may be said the disease cannot exist." It seems to me, however, that many authors have greatly overemphasized this peculiarity; they have apparently overlooked the fact that it is by no means confined to this disease; but occurs in many others to just as great or even greater degree. The tendency is to regard every bullous disease showing an annular arrangement of the eruption as belonging to the bullous variety of dermatitis herpetiformis.

A Dermatosis Requiring Differentiation

In this connection reference may be made to the disease distinguished by annular bullae described by early writers as a variety of pemphigus circinatus, but which is described by most recent authors as a bullous form of dermatitis herpetiformis. Now I believe that this affection is a variety of pemphigus and not dermatitis herpetiformis. I have had the opportunity to see a fair number of these cases, two of them quite recently, and I have been much impressed with the remarkable uniformity of the eruption which distinguishes them. It begins as tense hemispherical blebs filled with a transparent fluid which in the course of a day or two becomes cloudy, then frankly purulent. The blebs are seated at first on apparently normal skin, but when they have become purulent they are surrounded by a narrow

inflammatory halo. They extend peripherally quite rapidly, drying up in the center into a brown or yellowish crust so that in the course of a few days they become ring-shaped, varying in size from a large coin to the palm of the hand. The eruption is not confined to the skin but also attacks the mucous membranes of the lips, tongue and palate. It appears in successive outbreaks, each outbreak accompanied by more or less constitutional disturbance with elevation of temperature which at times may be considerable. Each successive outbreak is precisely like the one which preceded it both as to the character of the eruption and as to its course. The extraordinary uniformity of the eruption throughout the entire course of the disease, wholly unlike the multiformity so characteristic of dermatitis herpetiformis; the involvement of the mucous membranes; the considerable constitutional disturbance which accompanies each outbreak, are features which are much more characteristic of pemphigus than of any other malady.

CONCLUSIONS

Relying in part on ascertained facts, but also to a very considerable degree on analogy and hypothesis, we may conclude as follows:

1. That dermatitis herpetiformis is the result of a toxemia.

2. That the toxins responsible for its symptoms are probably of various kinds, but closely related in composition, and of varying origin.

3. That the resemblances which exist between it and certain other affections, such as erythema multiforme and pemphigus, probably result from a similarity of the causative agents concerned in these several diseases, and still more, from a similarily if not actual identity of the mechanism concerned in the production of the cutaneous phenomena.

BIBLIOGRAPHY

Bazin: Affections cutanées arthritiques.
Brocq: Ann. de dermat. et de syph., 1888, 9, Series 2.
Bowen: THE JOURNAL CUTAN. DIS., 1901.
Balzer et Sevestre: Bull. Soc. Fran. de dermat. et de syph., February, 1909.
Bogrow: Arch. f. Dermat. u. Syph., Vol. 48.
Crocker: Diseases of the Skin, Ed. 3, P. Blakiston's Son and Company, Philadelphia.
Duhring: Am. Jour. Med. Sc., February, 1897; also, Cutaneous Medicine, Part II, p. 440, footnote.
Danlos: Ann. de dermat. et de syph., Vol. 9, Series 3.
Dyer: New Orleans Med. and Surg. Jour., Vol. 24.
Elliot: Jour. Cutan. and Gen.-Urin. Dis., September, 1891.
Fox, Tilbury: Skin Diseases, Second American Edition, p. 222.
Hyde: Diseases of the Skin, 8th edition.
MacLeod: Brit. Jour. Dermat., September, 1909.
Pusey: THE JOURNAL CUTAN. DIS., 1897, p. 158.
Stelwagon: Jour. Am. Med. Assn., 1902, 39, p. 1291.
Tenneson: Ann. de dermat. et de syph., Vol. 10, Series 2.
Winfield: THE JOURNAL CUTAN. DIS., 1893, Vol. 11.

THE RÔLE OF THE VEGETATIVE NERVOUS SYSTEM IN DISEASES OF THE SKIN

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The archtype of the vegetative or autonomic nervous system is found in the ganglionated or metameric nervous systems of the lower vertebrates, in which in the absence of a forebrain and prior to the development of intelligence or consciousness the necessary functions of life are carried out through a few simple ganglions and nerve fibers. In man this primitive nervous system has been long disregarded because lost sight of in the study of the evolutionarily superimposed forebrain or cortex, with its highly organized association systems and central nervous system extensions. The activity of the vegetative nervous system still takes place below the level of consciousness and independent of intelligence, but it none the less sways the very foundations of life.

ANATOMIC DIVISIONS

The vegetative nervous system consists of two divisions; one arises from the midbrain, the bulb and the sacral portion of the cord, passes out through the oculomotor, the facial, the glossopharyngeal, the vagus and the pelvic nerves and is termed the craniosacral or extended vagus division or parasympathetic. The office of this nervous system is to slow or depress function, and it becomes in this way a conservator of energy. The other division of the vegetative system arises from the cord, from the first dorsal to the fourth lumbar segment and is called the thoracicolumbar division and corresponds to the former so-called sympathetic system. The effect of this nervous system is to accelerate or heighten function, and it becomes thus an exploiter of energy. Theoretically, the mutually antagonistic actions of the two branches of the vegetative nervous system result in a perfect balance which produces physiologic poise, but practically this seldom occurs, for not only are persons born with one or the other of these systems in domination, but through life are exposed to the effects of stimuli which influence inordinately one or the other of the two divisions.

FUNCTION

The function of the vegetative nervous system is the regulation and coordination of metabolic activities. It does this in part through its own automatism, but in the main it accomplishes its purpose through

the employment of messengers. The messengers used for this purpose are the hormones of the ductless glands. The ductless glands possess the power of a certain degree of autonomic secretion, but the larger part of their activity is in direct response to the call of the vegetative nerves. Not only does a ductless gland respond to the stimulus of the nerve, but its secretion in turn reacts on the nerve making it still more sensitive in function.

The great accelerator hormones of the human body, of which the prototype is adrenin, are secreted on stimulation of the thoracicolumbar or true sympathetic system. Adrenin on its secretion reacts on the sympathetic nerves so that this whole system throughout the body becomes much more highly sensitive, and the condition is called sympathicotony. Sympathicotony represents roughly a condition of accelerated metabolism. On the contrary, an increase in function of the opposite branch of the vegetative system, that is, the parasympathetic division, results in a condition known as vagotony and roughly represents a condition of retarded metabolism.

The type of great depressor hormones is represented by cholin, a product of the suprarenal cortex which, as regards its effect on the circulation, is the most powerful substance known in pharmacology, being a hundred times more active in causing a fall of blood pressure than is adrenalin in causing a rise. That this substance is produced on stimulation of the parasympathetic nerves and, in turn, raises the tone of these nerves we do not yet know from experiment. Sympathetic excitation accompanies the overactivity of the great energy producing glands, the gonads, the suprarenals and the pituitary; conditions of failure in function in these glands are associated with signs of decreased tone in the sympathetic system. Overactivity of the thyroid is paralleled by excitability in either the vagus or the sympathetic, depending on extrathyreogenic causes. Sympathicotony is seen in early exophthalmic goiter, vagotony is seen in nonexophthalmic toxic goiter. Hyperovarianism, hyperorchidism, hypersuprarenalism and hyperpituitarism show signs of increased excitability of the sympathetic system. In the pituitary insufficiency of acromegaly, in the testicular insufficiency of castration and eunuchism, in the ovarian insufficiency of ovariectomy or the menopause, and in the deficiency of Addison's disease, the vagus system is predominant in efficiency.

NEURO-ENDOCRINOLOGICAL MECHANISM

The interrelation of the ductless glands and the vegetative nervous system is so intimate that a disturbance which is primary in one at once affects the other, and for physiologic purposes they may be considered as an entity, namely, the neuro-endocrinological mechanism,

Dysfunction of this mechanism, or neuro-endocrinopathies, arise in response to three varieties of stimuli: (1) metabolic; (2) toxic, and (3) affective or psychic.

1. *Toxic Stimuli.*—These arise (*a*) As circulating toxins in the course of a general infection influencing the nervous tissues. An example of this is seen in the sympathetic irritation observed in general tuberculosis which is often mistaken for hyperthyroidism. (*b*) As bacterial irritants affecting the glands themselves, directly. An instance of this is seen in the overactivity of the thyroid in connection with a mouth infection, or the overaction of the ovary in early tubal infection.

2. *Metabolic Stimuli.*—These arise as biochemic reflexes from the body as a whole in process of growth, or as similar reflexes from certain organs in process of growth, as the sexual organs at puberty, or as reflexes from organs in process of growth for special function, as menstruation, pregnancy, spermatogenesis or lactation.

3. *Affective Stimuli.*—These arise as radiations into the vegetative nerves of impulses generated in the brain in association with the great primal feelings of anger, fear, subjection and lust. These emotions appear usually in consciousness under the guise of worry. Their potency is undiminished even when they are displaced into the unconscious through the mechanism of repression. They stimulate or inhibit the internal secretions.

RESULTS OF STIMULATION

Stimulation of the vegetative nervous system produces the following results:

1. Sympathetic irritability with evidences of increased function in the sympathetic nerves and related glands. The best example of this is exophthalmic goiter in its early stage. Other examples occur in the early stage of acromegaly, in pure hyperadrenalinism and in many hyperovarianisms. This function is increased by epinephrin and by atropin and diminished by acetylcholin.

2. Sympathetic exhaustion with decreased function in the sympathetic nerves and a relatively increased function in the vagus system. This is seen in the late stage of exophthalmic goiter, in the late stage of acromegaly, in adrenal insufficiency and the high pressure toxic goiters.

3. Parasympathetic irritability with evidences of increased function in the vagus nerves and related glands. This function is increased by acetylcholin and inhibited by atropin. The best examples are seen in the hyperthyroidisms of childhood and puberty, in nonexophthalmic,

toxic, low-pressure goiter, in thymus hypertrophy, and in many focal infections when the circulating toxin is a parasympathetic stimulant analogous to cholin. The gross characteristic of all parasympathetic states is a tendency to smooth muscle spasm and here we find the vast array of visceral and circulatory spastic conditions ranging from pylorospasm to angioneurotic edema.

4. Parasympathetic exhaustion with evidences of decreased function in the vagus system. This condition has not yet been worked out but it is probable that *status thymicus* is an instance of it.

SLOW PROGRESS MADE IN THIS STUDY

Progress in knowledge of the internal secretions has been retarded by the attempt of observers to synthetize symptoms into groups centered on the disturbance of a single gland. Advances can be made only when the horizon is extended and realization comes that we must look on metabolism as a great mosaic founded on the several ductless glands correlated in function through the medium of the vegetative nervous system; and that disturbance may arise in these nerves and affect the glands; or it may begin in glands and derange the nerves; but the end-result is a derangement in metabolism which may be reflected in the domain of any specialist, but will be found involving a far-flung array of other organs. It is the duty of every specialized observer to familiarize himself with the exact metabolism of his particular field so that he may call the attention of other workers to the appearance of metabolic irregularities. In no subject is this of more importance than that of dermatology in which the skin is an organ singularly responsive to metabolic perversions elsewhere in the body.

An acquaintance with the antagonistic functions of the two nerve systems is essential in endocrine study. Roughly speaking, sympathetic irritability suggests overactivity of some of the great glands which correlate their efforts with the adrenal medulla, while parasympathetic irritability suggests inactivity of these glands or an overactivity of tissues producing a cholinlike substance.

The presence of a goiter does not define the reaction, since in the presence of active suprarenals it gives rise to the exophthalmic sympathicotonic syndrome, while in the presence of inactive suprarenals it produces the nonexophthalmic vagotonic complex.

INFLUENCE ON THE SKIN

The influence of the vegetative nerves on the skin is seen in the variations in the following: the vasomotor tone, the exudations, the pigmentation, the quantitative changes in the secretion of sweat and fat, the temperature, the size of glands, the deposition of fat, the

nutrition of hair and nails, the distribution of hair, the texture, subcutaneous consistency, the tone of the hair muscles, and the sensation. The sympathetic skin is an excessively functioning skin, the vagotonic is a defectively functioning skin in the sense of perversion or diminution.

TIME OF ORIGINATION

Endocrinopathies of bacteriotoxic, or metabolic or affective causation may arise in childhood, in adolescence or during maturity.

1. *Preadolescent Endocrine Disturbance.*—(*a*) In childhood the principle glandular stimulus is metabolic, and although all the glands are invited to action, the brunt of the work falls to the thymus which is the chief incitant to growth in bulk. If the other glands fail of function, as in the gonadal insufficiency of Barker or in the pituitary insufficiency of Cushing, the thymus hypertrophies and excessive growth with fatness and genital atrophy ensues, associated with parasympathetic irritability. A mild type of thymus activity with parasympathetic irritation is seen in the condition separated by Czerny as the exudative diathesis. Here are seen overly fat children suffering from eczema or urticarial expression of obdurate type, in which patients appear also recurring attacks of vasomotor rhinitis and afebrile bronchitis and asthma with often pylorospasm. The vagus is so irritable that many agents effect symptom explosions, and these patients furnish much of the material used to illustrate anaphylactic reactions to foreign proteins. Recurring eczemas in fat children should prompt an inquiry as to the concurrence of asthma and spasmodic and vasomotor affections. Although some protein may be the offending factor, the fundamental basis is a hair-trigger nervous system and underlying this will be found an endocrine imbalance.

(*b*) In later childhood the chief endocrine disturbance and one of which the prevalence and importance is not yet recognized, arises from hypertrophy of the thyroid from bacterial irritation set free in a dental or tonsillar sepsis. Suppuration in or around deciduous teeth in childhood is the greatest menace to adult neural integrity. A child is usually parasympathetic in reaction and a goiter intoxication exaggerates the trouble. Acrocyanosis is constant, hands and feet are blue, cold and wet. The skin elsewhere is marbled and cyanotic and, on stroking, orange streak follows. The acrocyanosis favors the appearance of chilblains and even frank peripheral gangrene has come under my observation. Persisting urticaria and erythema multiforme with myalgia are frequent expressions. Further inquiry in these cases will elicit the evidence of mild choreiform movements which I have spoken of as a thyreogenic pseudochorea; of mental retardation, of persistent headache and of defective visual function. These children are usually

taken out of school for persistent headache or eye trouble about the twelfth year. Treatment is often sought for the excessive sweating. No cases offer greater opportunity to the dermatologist for constructive work.

2. *Adolescent Endocrine Disturbance.*—From puberty to maturity the pituitary gland, the suprarenal cortex and the gonadal tissues are particularly active. Although the other glands produce specific growth results, yet, practically, perversions at this time can be read in terms of the sex glands. For instance, pituitary insufficiency is at once shown by delay in development of the secondary sexual characteristics, while overaction of the cortex expresses itself in a precocity in the appearance of the hirci and crines. The growth of the sex glands is paralleled by a growth in size and in secretion of the sebaceous glands, and a soil is offered for forms of acne and seborrhea. Many of these cases of excessive sex gland activity need all their energy for growth purposes, and great improvement follows the partial withdrawal of the young patient from the myriad activities which center around puberty. Certain cases of eczema in the adolescent arise on a basis of sex gland insufficiency, and investigation will reveal the presence of a sexual neurosis which, if unchecked, extends its pernicious influence into later life as a neurasthenia. Thyroid activity at this time simply exaggerates preexisting conditions. Every adolescent with skin disease should have the condition and probable activity of the thyroid noted during the skin examination for later consideration.

3. *Adult Endocrine Disturbance.*— (*a*) Thyreogenic conditions: The thyroid hormone is a typical metabolic accelerator and yet as Kendall has shown acts only as a perfect accelerator in the presence of suprarenal activity. The determinant of thyroid effect is then the degree of suprarenal activity. Hyperthyroidism plus high adrenal activity produces exophthalmic goiter; a lesser degree of suprarenal activity leads to the nonexophthalmic toxic high-pressure goiter, while low or inactive adrenals induce the picture of the nonexophthalmic, toxic, low-pressure goiter with evidence of marked parasympathetic stimulation and many perverted skin functions.

The early exophthalmic goiter shows a high or exaggerated degree of skin metabolism, in increased warmth, in exquisite texture, in increased sensitiveness, in high color, and in increased arterial circulation. One phase is noteworthy and that is a species of pathologic blushing involving face and neck of arterial type which at times attains the subjective painfulness of an erythromelalgia. In these cases the thyroid activity may be reduced to controllable limits in one of two ways: (1) By removal of a focal infection the toxins from which are the deciding factor; or (2) by the uncovering of an emotional

repression which, acting as a foreign body in consciousness is radiating an irritation into the vegetative nerves, not different from a toxin. This applies to all forms of goiter. The late exophthalmics and the low pressure goiters express themselves in terms not unlike an adrenal insufficiency in that pigmentations are the rule and the skin is markedly insufficient in function.

(*b*) Gonadal conditions: All endocrine disturbances are pluriglandular, but in many we can point out the primary disturbing factor. The fibrocystic ovary which is a common type of pelvic disturbance is, in the beginning, a hypersecreting ovary and produces many reflections into the skin, of vasomotor irritability. Marked vasomotor imbalance in the skin of a young woman should suggest a survey of the pelvic history. The bogey of the menopause is largely a myth. The skin symptoms at that time are part of a hyperthyroidism, as a rule.

(*c*) Suprarenal conditions: Hyperadrenalism may be suspected in hyperemic conditions of the skin in which the blood pressure is raised, the coagulation time shortened, the blood sugar increased and a general overexcitability of the nervous system present. It is usually part of a complex involving overactive ovaries, thyroid or pituitary. The obverse of this picture with pigmentation accompanies other glandular insufficiencies, or may occur alone and, at times, imitates a pernicious anemia.

REPORT OF CASES

Case 1.—*Pathologic blushing in which the suprarenals are a possible factor.*

A telephone operator aged 34, was annoyed by persistent painful flushing of the face and neck without cause and accompanied by giddiness and vomiting. She had received treatment for indigestion for some months without help. The whole picture was one of great circulatory activity. The heart rate was 100, the blood pressure was elevated to 134, the face flamed as with passion. There was no organic defect. Dr. Neuman, the pathologist, reported that the coagulation time was reduced to 10 seconds and that the blood sugar was doubled, reaching 0.19. This corresponded to the critera laid down by Cannon for suprarenal activity. This patient was sent to a psychoanalyst, by whom a sexual complex was uncovered and improvement ensued.

Case 2.—*Pigmentation of the skin with loss of vasomotor irritability in a case considered pernicious anemia in which necropsy disclosed cystic suprarenal glands.*

A housewife, aged 64, developed a dark brown pigmentation of the hands and forearms during exhaustion subsequent to house cleaning. Cardiac asthenia was marked, there was much gastro-intestinal discomfort and the whole integument was of a lemon color. The roentgenogram revealed gallstones, the blood picture was that of primary anemia with 2,384,000 red blood cells; hemoglobin 35 per cent.; the gastro-enterologist reported the presence of achylia gastrica. The gallbladder was drained, the patient was transfused and was given adrenalin hypodermically and Rogers' adrenal residue by mouth. She lived fifteen months during which time the dark pigmentation cleared, but the lemon tint persisted. The necropsy report by Dr. Van Sweringen states: right adrenal almost entirely cystic, cortex not visible, the medulla appears markedly necrotic and of a dark chocolate color. The left adrenal

shows at the lower pole three small cysts; cortex not visible, medulla somewhat necrotic. The blood pressure in this case was never below 115-70.

CASE 3.—*Acrocyanosis in a patient who had a goiter and symptoms of parasympathetic irritation.*

A school girl, aged 16, complained of sweating hands which were always blue and cold. Examination showed that the thyroid was markedly enlarged, very vascular and pulsating. The heart rate was increased to 96, the blood pressure raised to 130-70. This girl had chronic headache, had been out of school a year for eye trouble, and had had much spastic indigestion for which her appendix had been removed. The thyroid was undoubtedly the basic factor in this illness.

CASE 4.—*Acrocyanosis with large areas of superficial gangrene simulating Raynaud's disease in a patient with goiter.*

A Jewish girl, aged 18, who clerked in an unheated delicatessen shop, complained of ulcers of the ankles and feet which she has been told were lupus. The history was that for the past four winters, with the onset of cold weather, blue spots appeared on the feet and ankles which later became raw. She was receiving roentgen-ray treatment. Examination revealed several square inches of ulceration on both ankles and feet. The feet were deeply cyanosed, cold and wet. The hands were cold, wet and cyanotic, but not ulcerated. The girl was very nervous and tremulous, the pulse was increased to 120, a large soft pulsating goiter was present and there was undoubtedly oversecretion. These sores healed readily when the feet were elevated on a warm pillow and kept off the cold floor of the store.

CONCLUSION

I believe that oftentimes within reach of the dermatologist lies the key which may unlock the secret of an illness which is much more extensive than the skin lesion, and that it is the duty of the dermatologist always to endeavor to find the underlying causes of skin diseases.

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ABSTRACT OF DISCUSSION

DR. ERNEST L. MCEWEN, Chicago: Dr. Reede has given us some fundamentals which we will appreciate more and more as time goes on. Are not we dermatologists making a mistake when we attack problems in etiology by dividing and subdividing diseases, placing them in more or less fixed categories, and trying to find some distinct cause for each? Would it not prove a more fruitful plan to regard a large number of conditions which we see as *reactions* on the part of the skin to factors which are harmful in some way to the organism? Then our problem would be to discover why and how the skin reacts, and this would lead us into fields which are difficult to search. I believe that the domain of which Dr. Reede has given us a glimpse today will prove of vast importance to dermatology. There are dozens of skin conditions of obscure causation in which the ductless glands are in some way concerned.

DR. WILLIAM ALLEN PUSEY, Chicago: I am perfectly ready to believe that the lines indicated by Dr. Reede lead to very fruitful fields. I was not able to follow him in some of his statements that seemed to me to be quite positive. I am quite ready to believe that endocrine glands will ultimately explain many things, but I cannot help feeling that they are used rather freely now as a working hypothesis to explain uncertain things. The cases he cited did not carry conviction to my mind. For example: Raynaud's disease was

frequently referred to in connection with thyroid insufficiency or excess. That is a highly interesting observation, but it does not cover, I am sure, a very large number of these cases in which an enlarged thyroid cannot be found and probably does not exist and in which other definite causal factors can be established.

Dr. Richard L. Sutton, Kansas City, Mo.: There is no doubt that thyroid involvement, with consequent upsetting of the general health, may follow tonsillar and apical infections. The internists are much more awakened to the importance of this etiologic element than we dermatologists. Not long ago I was consulted by a young woman who was suffering from bacteriophobia. No amount of argument would convince her that she was not in imminent peril of fatal infection. She washed and scrubbed herself forty times a day and, as a result, developed a severe dermatitis. I referred her to a psychanalyst who finally succeeded in uncovering and explaining her complex to her and with the discontinuance of the scrubbing the dermatitis promptly cleared up.

Dr. Henry J. Gerstenberger, Cleveland: As a pediatrist I am interested in what Dr. Reede had to say regarding the eczematous condition in infants to which he referred when he mentioned the symptom complex known as Czerny's exudative diathesis. The idea that exudative diathesis might have a vagotonic basis is not new. One of Czerny's assistants, Krasnogorski, in 1913, presented this view on the basis of the work of Hess and Eppinger, and reported excellent therapeutic results with the administration of a 1:1,000 solution of atropin, in doses varying anywhere from a total of 5 to 50 drops per day. We have tried this therapy recently, at the Babies' Dispensary, with varying results. In some cases the therapeutic effect seemed to be good and rapid, in others no definite results could be obtained, and all in all there seemed to be, in most cases, the customary "up and down" which we see in these cases under other and different forms of treatment. This varying result was more or less as I had expected it to be from theoretical considerations. The atropin is to be given until a physiologic effect can be obtained, which means, among other things, a reddening of the skin, due to a dilatation of the peripheral vessels. And it has never seemed quite clear to me how such a dilatation could improve a condition which is characterized by an excessive exudation, and yet such are the experiences of some authors. I should like to ask Dr. Reede if he could explain how atropin therapy could be of value under these circumstances in exudative diathesis cases showing skin lesions.

Dr. J. H. Stokes, Rochester, Minn.: During the period of my association with Dr. Wile it was a routine treatment to administer atropin in exactly the way Dr. Reede has described. The effects did not become real satisfactory until we carried the dosage to the point of toxicity. There were pupillary signs and the symptoms of erythema of the skin. The erythema did not materialize, the skin blanched, and the infants became very normal-looking children within a few hours. As to the psychanalytic work on the dermatoses, it is very little appreciated by dermatologists. Some patients will appear in the same state of health that other patients are, with every excuse for pruritus and other ailments, and will have none, while other patients, with no excuse at all, will have the disorders. I have been particularly interested in cases of pruritus vulvae and cases of that type, and I can now single out the cases of this type that have a psychic element and within a few hours can have a great change in the picture. This is accomplished largely by ridiculing the work of Freud. I have to my credit a number of cases of pruritus vulvae et ani and vaginismus that I have cured by treating the nervous mechanism.

Dr. Loretta Joy Cummings, Boston: In the last two years I have treated eight cases of acne rosacea at the Massachusetts General Hospital by roentgenizing the thyroid. The patients were given two or three erythema doses at intervals of about ten days and every case showed marked improvement.

DR. AUGUSTUS RAVOGLI, Cincinnati: There is no doubt that the ductless glands influencing the circulation have a great deal of effect in the production of different skin affections. We know that the endocrine glands work in unison, and that when one is out of its normal condition every one of them goes out of the normal condition. We have, for instance, the type of disorders of the thyroid known as hyperthyroidism, as manifested in Basedow's disease, and as hypothyroidism, found in myxedema. This secretion, together with the ovarian, controls the adrenals and some cases of chloasma are entirely due to the condition of the adrenal glands. Some cases of prurigo which we cannot explain may be explained when we find that there is hyperthyroidism in the patient. Scleroderma has a great deal to do with the internal secretory glands. The secretions of the hypophysis have such an influence in exciting the arterial circulation, and are of immense importance for the physiologic functions. Von Recklinghausen's disease, neurofibromatosis, has been found associated with the disturbances of the glands. It is of the greatest importance to follow this subject.

DR. B. N. EPLER, Kalamazoo, Mich.: I recently had a case of lipodystrophia progressiva which I reported before the last Michigan State Society meeting. Only twenty-four cases are reported in the literature—three besides mine in this country. In working up this subject, so far as the etiology of the disease is concerned, I find the consensus of opinion suggests that it is due to some disturbance of the endocrine glands or that these glands are a factor in the disease. This atrophy begins in children, usually about the age of 5. The cases may belong in the skin section, in that the characteristic symptom is complete atrophy of the subcutaneous fat. The child's face usually looks like that of an emaciated old woman and the picture is typical of the disease. The remarks just made as to the relationship of cutaneous lesions and endocrine gland disturbance seem to be supported in this class of cases.

DR. HENRY H. HAZEN, Washington, D. C.: Dr. Reede has given us only basic facts in endocrinopathy. In the past we have heard a large number of very diverse statements concerning diseases due to some sort of mysterious nerve influences. Dr. Reede has established just what conditions may be due to the vegetative nervous system, and I think we must conclude from a study of them that the vast number of dermatoses do not bear any connection whatever to this factor.

DR. EDWARD H. REEDE, Washington, D. C.: In the cases I spoke of I simply mentioned the things occurring in association with coincidental involvement of the skin and suggested no causal relationship. The question of dilatation of the blood vessels, which Dr. Gerstenberger raised, is one which has been animating investigators to a great extent for the reason that there are vasodilators in both of these nervous systems and also a posterior root vasodilator. The possibility is that we have a separate vasodilator mechanism hitherto unknown. This is largely concluded by what we learn from Reid Hunt's work published in the *Journal of Physiology,* February, 1918. In that experiment, whereas, as far as he can judge, acetycholin causes parasympathetic vasodilatation and atropin antagonizes it, yet dilatation will still follow nerve stimulation. The question is not one of sympathetic or parasympathetic, but vasodilatation of a separate mechanism. Atropin paralyzes the parasympathetic function and we attempt to get good from it with the hope that the sympathetic structures are able to carry on the work. An interesting factor in thyroid cases is that, whereas the sympathetic system is very active in the beginning, after they later become vagotonic an attempt to paralyze the vagus with atropin brings no improvement.

SUPERINFECTION IN SYPHILIS*

JOSEPH V. KLAUDER, M.D.
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It is a well known fact that a person who has suffered from syphilis is little liable to contract it a second time, but it must not be inferred from this that a true immunity is necessarily present. Ricord's dogma that "once infected with syphilis never again infected," no longer holds in the light of recent observations and experiments. The so-called "laws" of Colles and Profeta have likewise become obsolete. These laws were based on the observation that mothers who have borne syphilitic infants were not infected by their children while suckling them, although such children might infect wet nurses. Profeta's law was the converse of this, namely, that children born of mothers who suffered from active syphilis during the period of conception did not acquire the disease from their mothers.

These "laws" as proofs of true acquired or inherited immunity have been robbed of their value in the light of serologic investigations of Bauer, Knopfelmacher and others, which have shown that, inasmuch as mothers of syphilitic children usually give positive Wassermann reactions, such mothers are most likely suffering from syphilis in a latent form and are not immune in the ordinary sense. For syphilis is peculiar among infective diseases in the long number of years during which it may remain latent, and in the majority of cases the patient is apparently immune only because he is still syphilitic. This, as Neisser has justly urged, is not true immunity, but, as will be explained farther on, dependent on a relative insusceptibility of the skin to the access of a new infection.

SUPERINFECTION POSSIBLE

It is fairly generally agreed by those who have studied the subject, that individuals infected with syphilis are susceptible to a second inoculation or superinfection with syphilis not only during the period elapsing between the infection with syphilis and the appearance of the chancre, but also at periods shortly subsequent to the appearance of the primary sore.

It may be mentioned in passing that contrary to former teachings, it can no longer be maintained that a chancre is not auto-inoculable. In the writer's analysis of 200 cases of chancre, 24 per cent. were multiple. In some of these cases, according to the patient, the second

* Read before a meeting of the New York Academy of Medicine, Feb. 7, 1918.

lesion appeared subsequent to the first. Mention may be made of a person with a chancre on the finger and one on the penis; from each of the lesions spirochetes were demonstrated. The one on the finger appeared three days subsequent to the one on the penis. McDonough gives 30 per cent. as representing the number of chancres which in his experience were multiple.

BRIEF REVIEW OF THE LITERATURE

Noble reports cases in the various stages of primary syphilis successfully superinfected with secretions containing *spirochaetae pallidae* from the patient's primary lesion on a small area of scarification on the same person. In from three to eight days following the inoculation he obtained positive results, in some of which lesions the spirochetes were demonstrated. The sterile water controls were negative.

Queyrat reports a case successfully superinfected daily up to the eleventh, and Taylor one superinfected on the fourteenth day after the appearance of the primary sore; Mauriac and Neisser the twenty-second day, and Linderman the twenty-fourth day.

After the disease is well established as a systemic infection, that is, in the active "secondary period," many investigators, notably Mauriac and Neisser, have reported unsuccessful attempts to superinfect individuals.

However, Ehrmann succeeded in superinfecting syphilitics in the secondary period, in one case as late as six months after the appearance of the general eruption. In some of the lesions at points of inoculation he demonstrated spirochetes. These lesions were mostly papular in type, simulating the particular variety of lesion spontaneously manifest in the individual at the time. Positive results were obtained in from five to ten days after the inoculation and did not appear to be influenced by treatment administered prior to their appearance. The control inoculations with sterile water in some instances reacted to a slight degree but at none of these sites were spirochetes demonstrated. On further study of these areas he reports finding "significant histological changes." Ehrmann thought that the positive controls obtained were due to a hypersensitized condition of the tissues—von Pirquet's "Allergie."

According to the superinfecting experiments of Finger and Landsteiner the insensitiveness of the skin to superinfection in syphilitic subjects is not so complete as stated by other observers. They find that superinfection is successful in proportion to its proximity, in point of time, to primary infection. If general infection is not yet complete, a typical chancre can be produced, but from the time when constitutional symptoms appear it becomes progressively more difficult

to succeed. During the secondary period the result has some resemblance to a secondary papule, while in the tertiary stage ulcerated or nodular syphilids are produced, resembling tertiary lesions. And to produce any effect at all in these later stages, large amounts of the virus must be introduced. They further state that superinfection is possible "under certain circumstances in all stages of the disease."

Queyrat and Pinard report a successful superinfection of a tertiary syphilitic with chancre material, obtaining not a primary lesion but an ulcerated lesion having the clinical characteristics typical of the late skin manifestations of the disease.

Experiments in superinfecting syphilis

Superinfecting experiments on syphilitic individuals are harmless and may be performed with impunity. Superinfections, if successful, do not in any way influence the subsequent course of the disease, as shown by numerous attempts of investigators at active immunization of man and animals.

The writer in a subsequent paper will report the results of his superinfecting experiments on syphilitic individuals in the various stages of the disease. In these experiments the spirochetes from the person's "open" lesion and spirochetes from other sources were used. A study of the histologic changes produced by such inoculation, and of results of the agglutination of the same individual's serum with the spirochetes used to superinfect, was also undertaken.

Many investigators have demonstrated that syphilis can be superinfected in animals that are susceptible to experimental infection with this disease. Neisser succeeded in superinfecting monkeys in from 27 days to 645 days after the first infection. After waiting a sufficient period of time in order to obtain a negative result of the inoculation, it was possible with extracts from the organs from these animals to inoculate other monkeys. After treating the animals with spirochetocidal agents superinfection was again possible.

As Neisser has pointed out, this is not true immunity; the animals were only apparently immune because they still harbored virulent spirochetes, a condition of insusceptibility to "superinfection" existing, which Neisser designates as "Anergie."

As a basis of similar observation Kraus and Volk are of the belief that a specific skin immunity exists in syphilis.

Zinsser, Hopkins and McBurney have shown that it was possible to inoculate one testis of a rabbit after apparent recovery from a previous lesion. The opposite one could be successfully inoculated before, during, and after the existence of a lesion on the other side. These investigators conclude that the resistance which develops during

the disease is an expression of a localized tissue reaction as a result of an active invasion with the virus rather than as a result of an appreciable formation of circulating antibodies analogous to those observed in bacterial diseases.

According to Finger and Landsteiner, a syphilitic individual reexposed to the disease may develop a local lesion which is not a true primary sore, but a manifestation corresponding in character with the stage of the disease at which the patient has arrived.

The genital lesions outlined in the following case histories, appearing on persons recently infected with syphilis, are probably instances of superinfection in syphilis.

REPORT OF CASES

CASE 1.—F. C., aged 23, was an outpatient at the clinic at the University Hospital. He first presented himself with a typical macular-papular rash and a healed chancre on the foreskin. There had been no treatment prior to his visit. The Wassermann reaction was ++++ plus. Two injections of neoarsphenamin (neosalvarsan) were administered at weekly intervals and mercury was given by mouth for about one month. Ten months later the patient returned. He stated that he had had no treatment since his last visit. There was no subjective recurrence of the disease. He presented a small papular lesion about the size of a split pea with an ulcerative floor. He had had no local or internal treatment. The duration of the lesion was about two weeks. It appeared two weeks after intercourse. After a prolonged search a few spirochetes were found in the secretions from the sore. The Wassermann reaction was ++++. Clinical examination was negative except for pigmentary remains of the former eruption. The genital lesion disappeared under antispecific treatment.

CASE 2.—W. S., aged 26. He gave a definite history of a chancre in the sulcus of the penis, a secondary eruption and a ++++ Wassermann reaction. At this time he received six injections of arsphenamin (salvarsan) and a few intramuscular injections of mercury. All treatment was stopped. Six months later he presented himself with a small ulcerative area on the foreskin, the secretions from which contained spirochetes (a few seen in each specimen examined). This lesion appeared about twelve days after intercourse. Duration of lesion, ten days. The Wassermann reaction was ++++. The lesion disappeared under antispecific treatment.

CASE 3.—J. D. gave a definite history of chancre on the lip eighteen months previously. This was diagnosed and treated at another clinic. According to the patient, the dark field was positive and the Wassermann reaction was ++++. He received at this time one injection of arsphenamin (salvarsan) and twenty injections of mercury. All treatment was stopped. He presented himself with a small papular lesion on the shaft of the penis. Positive dark field. Duration of lesion, three weeks. The Wassermann reaction was ++++. The noteworthy clinical findings were: scar on the lip at site of former chancre; eye grounds, cardiovascular and neurologic examinations negative.

CASE 4.—C. W,. aged 22, first presented himself in 1914 with a typical chancre at Dr. E. H. Siter's clinic at the University Hospital. Dark field positive. The Wassermann reaction was ++++. He received mercury administered by mouth. No arsphenamin (salvarsan). The patient attended very irregularly. In 1915, after a long period of absence, returned for a blood test which

was +++. He subsequently attended very irregularly for mercurial treatment which was administered by mouth. In 1917, he again presented himself with a small ulcer at the preputial edge of an adherent foreskin. He had not been receiving treatment elsewhere. Dark field examination of the genital lesion was positive. Incubation and duration of the lesion was uncertain. The lesion disappeared under antispecific treatment.

CONCLUSIONS

The subject of superinfection is an interesting one from a clinical point of view and should be considered in the diagnosis of a genital lesion containing the spirochetes when appearing in persons giving a history of having had the disease. If in such lesions the spirochetes are found in profusion and the Wassermann reaction is at first negative, later becoming positive, it is evidence in favor of the lesion being a primary sore, a reinfection; whereas, if the spirochetes are present in scanty numbers and the Wassermann reaction is positive at the time of its appearance it is evidence of a superinfection.

Genital lesions which I have observed and regarded as the result of superinfection were papular-ulcerative and ulcerating in type, with little or no induration. They were clinically not chancres.

It is probable that many so-called second attacks of syphilis, or reinfection are instances of superinfection. There is nevertheless evidence that true second attacks of syphilis may at times occur. By a second attack should be meant the occurrence, twice in a patient's life, of a primary sore followed by secondary symptoms, and if this definition be accepted the phenomenon would be rather rare. As Neisser points out, it means not only that the patient has so returned to the normal as to react to the syphilitic virus like that of a non-syphilitic, but that he has lost any immunity which may have been conferred by his first attack.

In the differential diagnosis of a genital lesion of the nature herein reported, besides reinfection and superinfection, the following possibilities should be considered: Ulcerative processes over foci of syphilitic lymphangitis on the penis may in rare cases simulate a recrudescence of the primary lesion; a mucous patch or an abrasion; in these, however, the spirochetes are present in large numbers; a localization of spirochetes at the point of lessened resistance from the result of trauma.

The genital lesions herein reported were not regarded in a class of those mentioned above.

BIBLIOGRAPHY

McDonagh: Biology and Treatment of Venereal Diseases, Philadelphia and New York, Lea and Febiger, 1916.

Nobl: Ueber Autoinokulationen in der ii Inkubation, Verhandl. d. deutsch. dermat. Gesellsch., Berlin, 1906.

Queyrat: Bull. de la Soc. méd. d. hôp., 1904, No. 28, p. 905.

Taylor: THE JOURNAL CUTAN. DIS., December, 1890.
Mauriac: Cited from Neisser, loc. cit.
Neisser: Beiträge zur Pathologie und Therapie der Syphilis, Julius Springer, Berlin, 1911.
Ehrmann: Versuche ueber Autoinfectionen bei Syphilis, Verhandl. d. deutsch. dermat. Gesellsch., Berlin, 1906.
Finger: Dermatologische Studien, Vol. 20.
Finger and Landsteiner: Centralbl. f. Bakteriol., 1906, Ref. 38.
Kraus and Volk: Wien. klin. Wchnschr., 1906, No. 21, Ref. 60, Kongress d. deutsch. dermat. Gesellsch., Bern.
Zinsser, Hopkins and McBurney: Jour. Exper. Med., 1916, 23, pp. 329-341.

A CONTRIBUTION TO THE PATHOLOGY OF MYCOSIS FUNGOIDES

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Part I. Clinical

Mr. G. M., aged 37, was referred to one of the writers (Mackay) by Dr. J. Stefansson of Winnipeg, Dec. 18, 1916. The patient's home was in Kamsack, Sask.; his occupation was that of a farmer.

When he first came under observation he had a generalized eruption which was markedly hyperemic, especially on the face, and presented a moderate grade of epidermal exfoliation. There were no tumor formations. The patient stated that the rash made its appearance a year prior to the date mentioned, and that in the intervening period it displayed at times periods of betterment but never quite cleared up. The cosmetic appearance was the chief complaint together with the fact that the skin "felt like a sun burn." There was moderate itching and irritation, worse on the face and aggravated in intensity since the onset of the cold weather. Some infiltration of the skin, especially of the face, was manifest with deepening and accentuation of the normal lines and markings of the cutaneous investment.

There was also considerable glandular enlargement especially in the axillae and in the inguinal regions. The diagnosis of pityriasis rubra was made at this time.

CLINICAL COURSE

In a few days the patient returned to his farm. Six months later he again consulted us for numerous tumors of various sizes which had developed since we last saw him. These tumors were scattered all over the body, many were pea-sized and were embedded in the subcutaneous tissues, others were cherry-sized, and still others stood out from the surface of the skin forming knoblike projections of considerable size.

Many of the lesions had undergone spontaneous resolution leaving no sign or trace of the occupied areas. In others, some pigmented spots remained to mark the site of the tumor formations.

The growths were of the sessile variety, rose abruptly from integument that apparently differed in no wise from the neoplasms themselves. There was no hyperemic inflammatory zone about them, they were remarkably regular in contour both at their circumference and over the dome, with no indentures, markings or striations on their

surfaces. Pseudo-fluctuation was manifest in a few but no ulceration had taken place. Dr. Gordon Bell of the Provincial Laboratory isolated a staphylococcus by stab culture.

The preexisting rash was still in evidence, although it had receded very appreciably, the tumors now dominating the picture clinically. The rash was now regarded as a premycotic eruption ushering in the tumor stage of mycosis fungoides.

The patient was enjoined to guard against injury of the tumors and cautioned against any measure calculated to impair the resisting power of the overlying integument lest ulcerative changes might be superimposed. For like reason we refrained from taking a section for microscopic examination. Moreover, it is quite within the range of possibility, that this apparently trifling procedure may not be as innocuous as would appear, since relatively quiescent and benign neoplasms may be stimulated thereby to added growth and increased malignancy; the unknown morbific agency may be pressed into the open mouths of blood vessels or lymphatics, since the protecting walls which nature has thrown around these pathologic conditions in the effort to hem in, circumscribe and delimit the morbid process, are cut across and the conditions for widespread and disastrous dissemination are invited.

DIAGNOSIS

The diagnosis was made on the clinical findings and on the progress of the affection. The Wassermann reaction was negative. What were regarded as diagnostic points were the premycotic rash, multiple tumors coming in crops, tumors many of which had undergone complete involution; and despite these manifold changes, there was practically no loss of weight, diminution of strength or other evidences of constitutional impairment.

TREATMENT

Coincident with the development of the tumor stage roentgen-ray treatment was instituted and seemed to exercise a favorable influence on the skin manifestations, hastening the disappearance of the tumors and apparently inhibiting the formation of new growths. It was remarked also that the erythrodermia, the induration of the integument and scaling diminished, and that the discomfort from burning and itching was less pronounced than before the exhibition of this remedy.

SUBSEQUENT HISTORY

Eleven months after the patient first came under our care, he again applied for relief, complaining of pain and discomfort from the presence of masses in the axillae.

These glandular masses were quite sensitive to the touch. The inguinal group were in like manner enlarged. All the skin tumors had undergone resolution with the exception of one in the forearm to which he himself had applied a solution of carbolic acid. This tumor had broken down.

Dec. 28, 1917: His appetite was good, general health maintained; he was able to do ordinary farm work, the urine and heart were normal, and a blood culture showed no growth.

Jan. 16, 1918: He entered St. Boniface Hospital under the care of Dr. Benoit. His condition at this time was very grave. He rapidly grew worse and died on Jan. 20.

The postmortem conditions and the pathologic findings are described by Professor Boyd.

COMMENT

There seems to be considerable divergence of views among pathologists as to the histologic characteristics of these tumor formations, some classifying them with the granulomas and others with the sarcomas. From the clinical viewpoint, once ulceration supervenes the course and progress of the affection is for all practical purposes identical with the malignant type. It may be that the anatomic structure undergoes transformation of like character and synchronous with the change in the clinical symptoms consequent on the age of the lesion and the development of the fungoidal stage.

The history of this case tends to demonstrate that the skin condition is not an accurate criterion of the progress of the affection, that the plight of these patients is not bettered but rather made worse by the transference of the theater of action to nature's second line of defenses, the lymph glands, and that extensive pathologic changes of like origin to those found in the integument may be present in the viscera without giving rise to clinical manifestations in the victims of the disease.

PART II. PATHOLOGIC

The necropsy was performed fifteen hours after death. The body was that of a well-developed, muscular man, showing no evidence of emaciation. The skin presented peculiarities in several regions. Attention was at once attracted by the curiously dark appearance of the face, the right side of which was of a glazed leaden hue, not unlike that of a well polished stove, the left being of a coppery brownish tinge. This coloration did not extend on the neck to any distance. A fine scaling was evident on the face, and a coarser epidermal exfoliation on the scalp. Scattered irregularly over the body were a few hyperemic patches of a reddish-brown color, being most pronounced on the inner aspect of the knees.

A striking feature was the general glandular enlargement. This was most marked in the left axilla, where the mass was almost as large as the closed fist. Smaller masses were present in the right axilla, in the neck, in the submaxillary region, and in both inguinal regions. Apart from these glandular masses no tumors nor traces of former tumors could be detected in the skin except on the left forearm. Here, on the radial aspect just below the elbow, there was a single, sessile, ulcerated tumor, 2 inches in diameter, involving the skin and subcutaneous structures, but not attached to the deep fascia. It had a scooped-out, cup-shaped appearance, the rim being hard, thickened, and

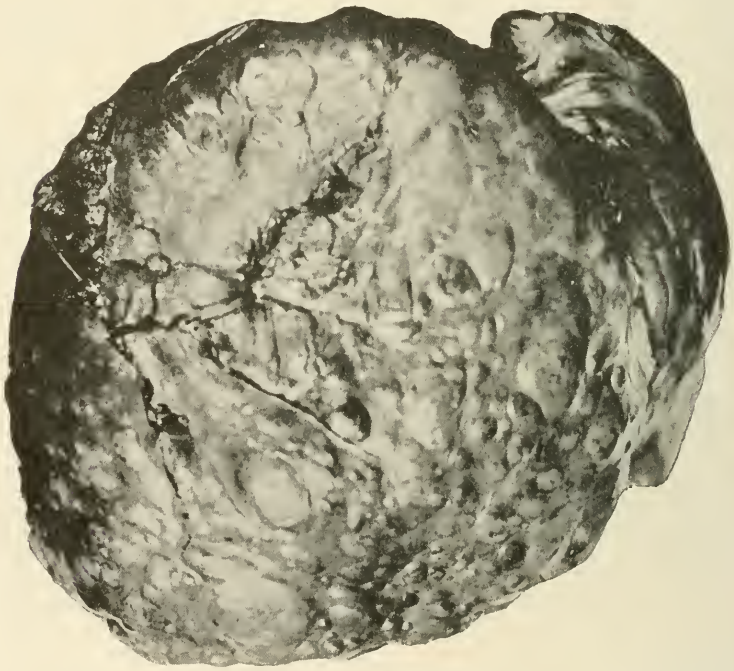

Fig. 1.—Greatly enlarged liver, showing large number of tumor nodules.

considerably elevated. The base was somewhat granular, and was covered by a thin, blood-stained secretion.

The abdomen was greatly distended, and in its upper part a large, hard, nodular mass could be made out.

On opening the abdomen a very large quantity of blood-stained fluid poured out and a liver of the most enormous dimensions and extraordinary appearance presented itself. Its lower margin extended fully 3 inches below the level of the umbilicus, and its upper surface had pushed up the investing dome of the diaphragm far beyond its normal limits. Indeed there appeared to be no room for anything else

in the abdomen besides this gigantic liver. Its entire surface was studded with innumerable knoblike protuberances varying in size from a split pea to a silver dollar. These tuberosities presented the most remarkable variety of colors and hues; some were bright red, some pink, others plum colored, but most were mottled or marbled with all of these tints. These tumors were very soft and friable, and the entire liver was of a similar consistence. There were no adhesions to sur-

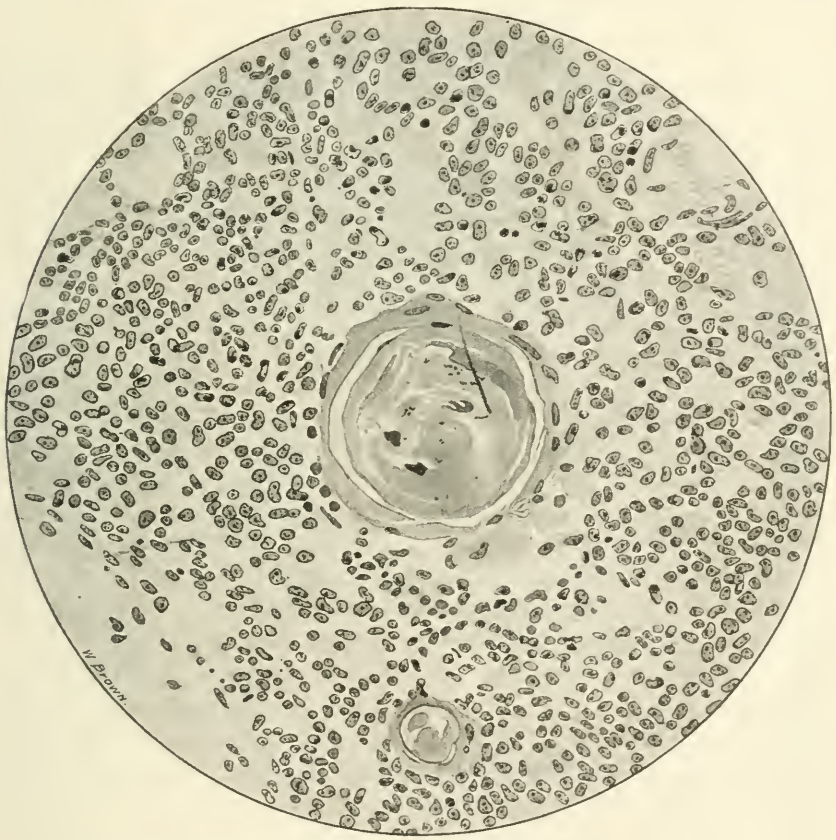

Fig. 2.—Capillary gland, showing tumor cells and hyaline bodies.

rounding organs. The liver on being removed from the body was found to weigh 288 ounces.

The liver was hardened by injections of Kaiserling's solution, and was sectioned later. It was found that the entire organ was studded with tumors identical with those which had already been observed on the surface. Indeed it was impossible to find a normal piece of the organ of 1 inch in diameter. It appeared incredible that life could be carried on at all with such enormous hepatic involvement.

The pleural cavity contained no fluid. At the apex of the right lung there was a nodule the size of a walnut, similar to those seen in

the liver. The mediastinal glands were somewhat enlarged, and there was considerable distention of the thoracic duct, which contained a quantity of milky fluid.

Small nodules were present in the cortex and medulla of both kidneys, the largest being 1 cm. in diameter.

The spleen was firm and slightly enlarged, but contained no tumors.

The heart, brain, stomach, intestines, pancreas, and adrenals presented no abnormality.

MICROSCOPIC APPEARANCES

All the organs in which tumors occurred presented a closely similar microscopic appearance. The liver may be taken as being representative. The organ was so thickly studded with tumors that it was with difficulty that uninvolved liver tissue could be found. At such spots, however, the liver cells showed remarkably little change. There was no evidence of atrophy, the cytoplasm and nuclei stained in a perfectly normal manner, and there was little or no infiltration of tumor cells between the columns of liver cells. In short, the line of demarcation between liver tissue and tumor was sharp and abrupt. The tumors were purely cellular in structure, consisting of large round cells, very uniform in size, with an oval or spherical nucleus which did not stain unduly deeply, the whole somewhat resembling a myelocyte. Many of the cells showed mitotic division atypical in character, there being but few examples of the usual monaster and diaster figures. There was no caseation, no congestion of vessels, and no small-celled infiltration. Hardly a trace of intercellular substance could be seen. The appearances were those of a rapidly growing large-celled sarcoma, and certainly in no way suggested a granulomatous condition.

The microscopic picture in the case of the kidney and the lung was identical with that just described. A sharp line of demarcation existed between the tumor formation and the tissue of the organ, the latter being remarkably normal in appearance. The tumor consisted of the same large cells, with complete absence of stroma.

In the affected glands the glandular tissue was entirely replaced by what may for the present be called tumor cells. These cells varied more in size than those seen in the other organs. Many of the cells contained two or more nuclei, and pyknosis and other degenerattive changes were common.

Pieces of skin from the pigmented areas were unfortunately not removed for examination—a most regrettable oversight. However, the solitary tumor of the skin already described as being present on the left forearm, together with the skin in the immediate neighborhood, was removed and subjected to careful examination. Much of the surface of the tumor was ulcerated, and displayed the usual appearances of an ulcer. On the immediate surface there was a layer of fibrin and

coagulated plasma, while a little deeper were numerous thin walled blood vessels from which abundant hemorrhage had occurred. Here and there were elongated cells which might be taken as fibroblasts, and large numbers of polymorphonuclear leukocytes were present. Deeper still was a great mass of tumor cells extending far down into the cutis vera, and also outward under the epidermis on either side. At the edge of the ulcer the corium was unduly fibrous, the fibers showing some degree of hyaline degeneration. Here and there were vessels around which was a small round-cell infiltration. Right up in the papillae were collections of cells, mainly lymphocytes and plasma cells. The structure of the tumor itself was undoubtedly the same as that of the tumors of the glands and the internal organs. A remarkable number of cells showed a marked degree of karyorrhexis. In these cells the nucleus was broken up into a number of small globoid bodies of varying size which took on a deep nuclear stain. This appearance was perhaps due to the previous treatment with roentgen rays, such changes being frequently found after application of the rays. On the other hand, Unna and others have described cases of mycosis fungoides in which this fragmentation of the nucleus was a very marked feature.

The skin adjacent to the tumor did not show pathologic changes of any kind.

There still remains to be described the most remarkable of the microscopic findings. When the axillary glands were examined it was at first thought that a piece of the thymus had been removed, for in parts of the section there were groups of structures which were apparently identical with the Hassall corpuscles of the thymus. These consisted of flattened, elongated cells presenting a very marked whorled or concentric arrangement. The outer part of the bodies was formed of endothelial-like cells, but the center was hyaline and structurelsss, and in many cases the appearance was similar to that of a psammoma body. The inguinal glands were examined, and many examples of the bodies were found. Finally, the nodule in the lung presented exactly similar appearances. They were not found in the kidney or skin tumors. Even in the organs, however, where they were well marked many sections failed to reveal any, so that it is possible that they may have been present in some parts of all the lesions.

It is difficult or impossible to determine the exact nature of these bodies. They are quite unlike anything seen in ordinary sarcomas. In places where they were present a thickening of the vessels was noticed, with a tendency to proliferation of the endothelial cells, and it is possible that the bodies were derived from blood or lymph vessels. Even were that the case, however, we are still quite in the dark as to the nature of the impulse which gave rise to such a proliferation. Neither in a sarcoma nor in a granuloma have bodies been described which could be mistaken for the Hassall corpuscles of the thymus.

SUMMARY OF NECROPSY FINDINGS

To sum up, tumors in the skin, axillary glands, inguinal glands, liver, kidney and lung all present the same histologic picture with minor differences of little importance. This picture is one of a highly cellular structure, the cells of which are undergoing mitotic division, and the whole resembling the appearance of a large round-cell sarcoma. In places hyaline bodies of apparently endothelial origin are to be seen.

COMMENT

Much has been written about the pathology of mycosis fungoides. In a recent paper, Fraser* gives a list of nine suggestions by various authorities as to the nature of the condition. Such a list is conclusive proof of our ignorance on the subject. It is not even universally admitted that such a distinct entity exists. The two chief views are that it is a skin sarcoma or a granulomatous condition due to some infection of unknown nature. Very few cases of visceral involvement have been described, and in several of these it has been suggested that the visceral involvement was a sarcomatous condition which happened to coincide with the skin disease.

The present case appears to disprove conclusively this last hypothesis. It can be stated with perfect confidence that the tumors of the skin and of the internal organs were identical in nature. Whether or not these should be described as sarcomatous it is difficult to say. If they are true sarcomas, then there is no such pathologic entity as mycosis fungoides, for the present case conformed to the clinical picture of that disease with remarkable faithfulness of detail.

It commenced with a rash typically premycosic in type. After a period of many months, skin tumors characteristic of the disease made their appearance, and later they characteristically disappeared, all save one which had been interfered with and injured, and which became ulcerated and developed the typical mycosic appearance. The stage of general glandular involvement followed in due course, succeeded finally by the death of the patient. It is a textbook picture of a clinical case of mycosis fungoides.

If it is to be accepted as a case of sarcoma of the skin, followed by glandular and visceral involvement, then the term mycosis fungoides becomes no longer justifiable. On the other hand, the hyaline bodies observed in many of the lesions certainly seem to bear no relationship to sarcoma as we know it. The problem of the nature of mycosis fungoides is still unsolved, but it has been shown that true visceral involvement may occur in a case which presents the classical clinical picture of the disease.

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*Fraser, J. Frank: The Pathology of Mycosis Fungoides, THE JOUR. CUTAN. DIS., 1917, 35, p. 793.

Clinical Report

ETIOLOGY OF CANCER OF THE LIP

DOUGLASS W. MONTGOMERY, M.D.
SAN FRANCISCO

It is quite unlikely that cancer of the lip or of any other region is due to any one etiologic factor. The etiologic value of chronic irritation, however, seems to rest on an assured basis. As far as the lower lip is concerned the usual irritant is tobacco, and this is now so well recognized that, if a patient arrives suffering from cancer of the lower lip, the inquiry as to the use of tobacco is made, and, if the sufferer is found to be an excessive smoker, it is usually conceded that an adequate reason for the presence of his affliction has been found. If, however, the patient does not smoke, the etiology is concluded to be obscure, and rarely any further inquiry is made. The following instance, while not conclusive, yet is most interesting, and the explanation adduced may be correct.

REPORT OF CASE

Clinical History.—A physician, aged 58, and enjoying good general health, called on me, April 9, 1915, on account of a lesion on the exposed red of the lower lip just to the left of the median line. It was about 4 mm. in diameter and was slightly raised, accurately circular and circumscribed, rounded and flattened, and was a little deeper red than the surrounding surface. There was some infiltration which could be appreciated by the opposing finger and thumb. This lesion had been present for some weeks. A thin pellicle would form on its surface which would peel off like damp wall-paper, leaving a surface dotted with raw loculi sensitive to salt. With each peeling the affected area became more restricted.

He had not smoked for years, in fact not since his student days in Germany.

I applied trichloracetic acid and ordered the frequent application of boric acid ointment.

More than two years after this, May 2, 1917, the physician again called, and he now had a raised, flattened circular elevation, 5 mm. in breadth in the exposed red of the lower lip, 5 mm. to the left of the median line. It was probably a little infiltrated, and a slight scale formed on it each morning. It looked much like a very early precancerous seborrheid of the lower lip.

Etiology.—The interesting thing about it was the patient's suggestion as to the origin of the lesion. Every morning while shaving he would catch the lower lip with his teeth in order to put the skin on the stretch, and, as he demonstrated to me, the left median incisor struck this very spot. The patient himself had no doubt that this recurring irritation was the cause of this malady. And it also seems to me that these repeated traumatisms on a seborrheic epidermis furnishes an adequate explanation for the occurrence of the lesion.

Treatment.—This time I used as treatment a radium plaque containing, in a dime-sized area, 24.23 mg. of radium element. This was shielded with aluminum, 0.02 in thickness, and retained in place for ten minutes.

Results.—I did not see the patient again for nine months, when he came in for a warty growth on the dorsum of the tongue. There was no trace of the lesion on the lip, and the markings of the mucous membrane in the previously affected situation were absolutely normal.

COMMENT

It may be objected that the proof that this labial lesion was cancerous is not conclusive. Its clinical appearance, its induration and its recurrence after treatment were all points in favor of this hypothesis, however. That it cleared up entirely under adequate radium treatment is just what may be expected in such lesions and does not at all exclude cancer or a precancerous condition.

Correspondence

MATCH-BOX DERMATITIS

To the Editor: I would like to call the attention of your readers to the etiology of a novel dermatosis which is suggested by the name of "match-box dermatitis." And first let me report my own case. For the past two months I have noted an oblong patch of what seemed to be a dry eczema on the anterior surface of my upper thigh. The skin was reddened, rough and slightly thickened and, though there was no annoying pruritus, slight excoriation resulted from scratching. Like a barefooted cobbler's child it received no treatment and its cause was unsuspected. One day I was asked by a medical friend to see a patient who had a similar patch of dermatitis on the upper, anterior portion of his thigh. Redness and swelling showed the inflammation to be more acute and my colleague suggested that it might be caused by a safety match-box as in the cases recently reported by C. Rasch and others in a Danish journal. Comparison of his thigh with my own showed patches of exactly similar location, size and outline. They were vertically oblong and opposite the left trouser's pocket in which each of us had been in the habit of carrying a safety match-box of the larger size.

I have no doubt that this dermatitis results from phosphorus or some other constituent of the dark brown striking surface of the box and that the irritation is sufficient to act through two or three layers of clothing. Since transposing the contents of my right and left trousers' pockets a week ago, the dermatitis has subsided on my left thigh but has not as yet appeared on the right.

Whether all safety match-boxes are noxious or only certain brands I cannot say at present, but it is evident from the foregoing that "match-box dermatitis" is not confined to Denmark. GEORGE HENRY FOX, M.D.

Society Transactions

NEW YORK DERMATOLOGICAL SOCIETY

Regular Meeting, March 26, 1918

JAMES C. JOHNSTON, M.D., *President*

SARCOMA. Presented by DR. KINGSBURY.

The patient, a woman, had had a pigmented mole on the forehead. About eight months ago it became inflamed and she picked it, and then on the advice of her physician it was operated on by a surgeon. Later, lesions appeared on the top of the scalp and then she received radium treatment, of eight hours,' six hours,' and two hours' duration. After the radium applications she had considerable rise of temperature and swelling of the face and a fairly clear history of erysipelas. The condition was still active.

DISCUSSION

DR. TRIMBLE said that it was only another instance of the futility of operation in melanoma.

DR. MACKEE said that his experience in these cases of recurrent sarcoma was that radium or roentgen-ray treatment would cause the individual lesion to disappear, but would have no influence on the outcome of the case. Sarcoma, the speaker said, was a good deal like malignant epithelioma, in that one could never tell how soon metastasis might occur. It might occur as soon as there was clinical evidence of the disease. If the disease was localized, a wide excision might result in a cure, but recurrences were frequent because metastasis occurred before the excision. In the case under consideration there was nothing to do but apply radium or roentgen rays. The nodule over the mandible would probably disappear, but it would only delay matters for perhaps a year or so, for a visceral metastasis would probably carry the patient away.

DR. KINGSBURY said that the woman had already had radium treatment applied to the lesions by a physician familiar with that work, and every time it was applied it seemed to stir up matters and make the condition worse. There seemed to be a progressive metastasis of the growth. Dr. Janeway, who had made the applications, thought it inadvisable to use radium on any of these cases of sarcoma, and doubted if he would ever again try it on this type of sarcoma.

DR. MACKEE said that his experience did not agree with that of Dr. Janeway. Dr. Wise would probably remember a case of multiple sarcoma, which the speaker had treated, in which the lesions were scattered all over the body, and every lesion disappeared under one intensive application of beta rays. The gamma rays were not so effective. The treatment, however, only delayed matters, for later the patient developed pulmonary metastases. The speaker said that he had had about fifteen cases of sarcoma, most of them having been referred by Dr. Johnston for roentgen-ray treatment. Most of the patients were still living, simply because metastasis had not occurred.

DERMATITIS HEMOSTATICA. Presented by DR. WISE for DR. FORDYCE.

The patient, Kate G., aged 50, gave a history of having had two miscarriages and one living child. The husband was said to be healthy. The duration of

the condition of the skin was one year. In addition, she had a leukoplakia of the tongue. On the lower portion of the right leg, anteriorly, was a patch of reddened skin, the redness partially disappearing under pressure. In the midst of the patch were numerous "cayenne pepper" spots. The leg was deformed, edematous, and swollen as a result of varicose veins. The other leg was also edematous, but free from the dermatosis. There was no pain or itching, and there had been no preceding eczema.

DISCUSSION

DR. MACKEE said the case was interesting because of the confusion existing relative to the differentiation of several entities having as a prominent feature vascular disturbances in the skin of the legs.

One entity was Majocchi's purpura annularis telangiectodes, of which several examples had been presented to the Society. Clinically it could be recognized by recurrent attacks of an eruption that could be divided into three stages—telangiectatic, purpuric, and pigmentary. The elementary lesion was a punctum, and these puncta coalesced, spread by the formation of peripheral satellites, while the central puncta disappeared, leaving pigmentation and, perhaps, atrophy. In this way, annular lesions were formed. After several months, the eruption disappeared, but usually returned in a year or so.

Schamberg's progressive pigmentation started as red puncta, usually on the shins. These puncta also coalesced, and occasionally produced annular configurations. As the puncta disappeared, a deep pigmentation remained and persisted for months and years. The eruption did not occur in definite outbreaks, but was steadily progressive.

Klotz' dermatitis hemostatica was a somewhat similar condition, occurring in varicose and edematous legs and likely to be associated with an eczematized skin.

Histologically similar features had been found in the three types, although hyaline degeneration and sacculation of the vascular walls had been more constantly found in purpura annularis telangiectodes. Increase in the number of vessels, panarteritis, infiltration, etc., had been encountered in all types.

The speaker thought that the case under discussion could be definitely identified as one of Schamberg's progressive pigmentation.

CASE FOR DIAGNOSIS. TINEA? SYPHILIS? Presented by DR. WISE for DR. FORDYCE.

The patient, Annie K., aged 31, single, presented lesions on the hands of two months' duration. When she first presented herself at the clinic three days earlier, a tentative diagnosis of syphilis was made on account of the difficulty of differentiation between tinea, syphilis, or eczema, although the history in regard to syphilis was entirely negative. The hands were covered with a squamous and serpiginous, scaly eruption consisting of isolated and coalescing lesions, some of them scalloped, others dumbbell-shaped, giving evidence of spontaneous involution. The lesions closely resembled eczematoid ringworm. As a result of treatment, they had greatly changed in appearance, having become vesicular and pustular. The microscopic examination for tinea was negative.*

DISCUSSION

DR. WHITEHOUSE said that the case interested him very much. He was often confused by the fact that this type of dermatitis spread and undermined the epidermis with outlying vesicles and pustules. Probably some of them were cases of ringworm, but it had been difficult to find the fungus in several

* Subsequent examination of the patient's blood revealed a ++++ Wassermann reaction.

instances. These conditions were very puzzling and difficult to cure. He hardly knew where to classify them.

DR. ROBINSON said he would consider it as a dermatitis, probably streptococcic in origin.

DR. HOWARD FOX recalled cases published by Dr. Ormsby on dermatoses of the palms and soles, particularly those that looked like eczema. He proved that a great many of these cases were really ringworms, and suggested chrysarobin for treatment. Dr. George H. Fox had treated many of these cases that resembled chronic eczema. It seemed probable that some of them were ringworm and were cured with chrysarobin.

DR. TRIMBLE said that he had read the article, but Dr. Ormsby had laid as much stress on benzoic and salicylic acid. He himself, however, had had better success with chrysarobin.

SARCOID AND FAVUS. Presented by DR. KINGSBURY.

The patient was a married woman and the condition had existed for about a year. She presented a discoid patch on the face composed of several small plaques arranged in a circle showing some infiltration, telangiectasia and central atrophy with scaling. The lesions on the arm were more deep seated and nodular in character. The scalp presented alopecia and scarring from favus.

DISCUSSION

DR. WISE said that this was the third or fourth time within the year that he had seen cases presenting this combination of lupus erythematosus and sarcoid. The lesions on the face looked like lupus erythematosus, the lesions on the arm were probably sarcoid.

DR. TRIMBLE agreed with the diagnosis of sarcoid, but thought that the lesions on the face were also sarcoid and not lupus erythematosus.

DR. WHITEHOUSE agreed with Dr. Trimble in regard to all the lesions.

DR. MACKEE said that both lupus erythematosus and sarcoid must be considered. The adherent scales, the telangiectasia, and the superficial central atrophy suggested lupus erythematosus. The nodules did not exclude lupus erythematosus, because nodules occasionally occurred in that disease. As a rule, however, nodules in lupus erythematosus were due to edema instead of infiltration and, therefore, they did not last very long. The fact that such lesions had existed for several months in the case under discussion was suggestive of sarcoid. Another point in favor of sarcoid was the fact that the four small nodular lesions on the right side of the nose were arranged in an annular configuration. While the speaker favored a diagnosis of sarcoid, he thought it would be necessary to confirm the differentiation by microscopic study. The lesions on the arm were definitely sarcoid, but this did not preclude the possibility of lupus erythematosus of the face, for the two conditions were occasionally found in the same patient. The speaker called attention to the anatomic situation of the arm lesions—in the subcutaneous tissue, which would indicate the Darier-Roussy type of sarcoid. The face lesions, on the other hand, were in the skin and were probably representative of the Boeck type.

LUPUS VULGARIS AND EPITHELIOMA. Presented by DR. WISE for DR. FORDYCE.

The patient, D. K., aged 58, had a lupus of twenty years' duration. His wife had had two miscarriages, three children living, and one dead. The lupus occupied the entire front portion of the neck as well as the lower part of the right cheek, extending from the jaw line on the left side to 4 inches downward on the neck. The lupoid skin was dry, scaly, and nodular at the periphery. The under portion of the patch consisted of an ulcer 5 inches long by 1½ inches

broad, with sharply defined rolled edges, and in the central portion there were several islands of whitish nodules. There were enlarged glands in the submental region, forming a tumor resembling a goiter, which had appeared five years before. The man had never had any treatment for his lupus. He had been sent to the hospital for the removal of the gland if possible, but it was not thought advisable to operate on it.

DISCUSSION

DR. TRIMBLE said that someone had suggested it might be a lupus tumidus.

DR. HEIMANN said that he had mentioned the fact that it looked like lupus tumidus, but the lesion was not on the ear. It was a boggy infiltration, perhaps a granuloma.

DR. MACKEE said that clinically the condition looked very much like an ulceration resulting from roentgen ray or radium applications. There was an indolent ulcer and an underlying edema of the subcutaneous tissue, both of which could be caused by roentgen rays or gamma rays. The history, however, precluded this diagnosis.

DR. WISE thought that the tumor under the chin was not a skin disease, but was underneath the skin and was probably a gland which might be tuberculous. He did not think it could be classed as a lupus tumidus for the reason that it was a subcutaneous growth.

LUPUS VULGARIS. Presented by DR. SCHWARTZ.

C. H., aged 47, presented a lesion on the face of sixteen years' duration. The case was shown because of the distribution of the lesion, which suggested lupus erythematosus, although there was no doubt of its being true lupus vulgaris. The patient presented the typical destruction of the tip of the nose seen in lupus vulgaris. The patient also had a lesion of the knee, and the roentgen-ray showed an exudative inflammation with no bone involvement.

DISCUSSION

DR. HOWARD FOX agreed with the diagnosis of lupus of the face.

LYMHPANGIOMA CIRCUMSCRIPTUM, SHOWING EFFECTS OF RADIUM TREATMENT. Presented by DR. TRIMBLE.

The patient was a young woman, aged 26, who had previously been presented before the Society. The lesion, which had existed since childhood, had been unsuccessfully operated on at that time, and was followed by a rather large hypertrophic scar. When the patient was first seen, about a year ago, many deep-seated lymph vesicles were observed over the scar, and several fairly large areas of papular or verrucous outgrowth. Three exposures of radium had been given by Dr. MacKee and three by Dr. Trimble. The radium had removed all the warty tissue and caused many of the collections of lymph vesicles to disappear. The hypertrophic scar was about the same, perhaps a little flatter than when first observed. A photograph was shown illustrating the appearance of the growth before treatment was started.

DISCUSSION

DR. HOWARD FOX said that lymphangioma was best treated with radium. Dr. Simpson of Chicago had obtained some excellent results.

DR. TRIMBLE said that he had four cases under radium treatment, and this was the only one which had been treated long enough to show improvement. The speaker said that this case also had a brawny swelling underneath, which was undoubtedly a deep-seated plexus of lymphatics. He did not, however, expect any improvement in that. He did not expect to go further in his treatment after the superficial or skin lesions were removed.

RADIODERMATITIS. Presented by DR. WISE for DR. FORDYCE.

George R., aged 29, received an injury of the back five years before, resulting in a fracture of the vertebrae, for which a roentgenogram was made a number of times. About three weeks after the last exposure, an erythema with a follicular eruption appeared. When presented, the radiodermatitis had existed for twelve weeks. There was a sharply defined circular plaque, 6 inches in diameter, between the umbilicus and the pubes. In the upper segment of this plaque were prominent follicular excrescences; in the lower segment, the follicles had coalesced to form a uniform patch. The lesions were more pronounced in the center than in the peripheral portions, the area corresponding to the window of the roentgen-ray tube holder. About an inch from the upper border there was a slight depression the size of a watermelon seed. The patient stated that he had had nineteen or twenty roentgen-ray pictures taken.

DISCUSSION

DR. MACKEE said he had never before seen a radiodermatitis with such marked follicular involvement.

DR. WISE asked whether it might turn out to be a second degree burn.

DR. MACKEE said that it was a very mild second degree radiodermatitis. If it was a severe type of the second degree, or a third degree dermatitis, the progress would have been more rapid.

DR. TRIMBLE reported on a case presented at the November meeting. He had then shown two patients with a diagnosis of sarcoid, one being a young Scandinavian with two or three lesions in the right malar region. They were rather milky white with a mild purplish color and had been there for about two years. In this case he had made a definite diagnosis of sarcoid clinically. The other patient was a young woman with a lesion on one side of the nose which was depressed, with slight atrophy in the center, and a waxy border, bearing some resemblance to an epithelioma that had not ulcerated. This case turned out to be sarcoid. There was some difficulty in getting a biopsy from the young man, but enough tissue was obtained to make the slides. It had some resemblance to sarcoid, but no giant cells were found, and it had not been definitely decided to be sarcoid, although he was still inclined to believe it such from the clinical evidence. The case of the young woman was definitely sarcoid.

DR. HEIMANN said that the absence of giant cells alone would not be sufficient to exclude sarcoid, if the rest of the changes suggested tuberculosis.

MANHATTAN DERMATOLOGICAL SOCIETY

Regular Meeting, April 9, 1918

HOWARD FOX, M.D., *Chairman*

KERATOSIS PALMARIS ET PLANTARIS. Presented by DR. PAROUNAGIAN.

The patient, a girl, aged 13 months, was born in the United States; both parents had been born in Russia. The disease had been present one month and involved the palmar and dorsal surfaces of the hands. The surfaces were thickened, reddish and scaly and somewhat fissured with sharply marginated borders. As far as could be ascertained there were no subjective symptoms.

DISCUSSION

DR. WALLHAUSER said the condition presented an inflammatory character which was opposite to the grayish white color seen in keratosis palmaris et plantaris.

DR. WISE agreed with the diagnosis as presented.

DR. SATENSTEIN made a diagnosis of congenital syphilis on account of the inflammatory condition present.

DR. PAROUNAGIAN said he examined the patient carefully and did not think the case resembled syphilis; in the first place, this would be a tertiary manifestation and the child was only 13 months old and well developed. The mother's history was negative as to miscarriage or anything of the kind. The thickening led the speaker to make the diagnosis of keratosis palmaris. The Wassermann reaction was negative.

DR. SATENSTEIN said the child was 13 months old and had only two teeth and a child this age should have six teeth, evidencing retarded development.

DR. WISE said that even if the child had a positive Wassermann reaction the diagnosis of keratosis palmaris still might hold good. He did not think it would heal under antisyphilitic treatment but that it would heal under roentgen treatment.

DERMATITIS HERPETIFORMIS. Presented by DR. WISE.

The patient was a woman, aged 67, from Dr. Fordyce's clinic and had had the condition for two years. There were papules and broken down vesicles on the face, chest, back and upper and lower extremities; the upper and middle part of the back being more or less immune. There was pigmentation and the patient said the affected parts were very itchy. The speaker considered the case to be an unusually classic picture of dermatitis herpetiformis.

DISCUSSION

DR. PAROUNAGIAN agreed with the diagnosis.

DR. WEISS said these cases were very rebellious and became worse after active treatment. He said he would like to know from those who had had experience, whether in these cases short exposures to the roentgen ray would do any good.

DR. WISE said he did not think that they had treated Duhring's disease with the roentgen ray. They found that sulphur ointment helped the patient and sometimes the eruption disappeared and did not recur. They gave increasing doses of arsenic with good results, at times.

DR. SATENSTEIN said three cases had cleared up under autoserum. He also said he would like to hear from Dr. Fox regarding the autoserum treatment of dermatitis herpetiformis.

DR. FOX said this case reminded him of a woman, aged 80, who had a severe eruption and who was extremely nervous and mentally affected. Dr. Howard Fox gave her autoserum treatment and not only did her dermatitis herpetiformis clear up, but the general condition of the patient was greatly improved. In a number of cases he had seen good results from autoserum.

DR. SATENSTEIN said he recalled that at the American Dermatological Association it was said that autoserum in dermatitis herpetiformis was almost a specific. He thought every case of this disease should be treated with autoserum but one must be careful of the gastro-intestinal condition.

DR. MOUNT said he had one case under autoserum without any improvement; not even the mitigation of the itching.

DR. WISE asked Dr. Mount how many injections he had given.

DR. MOUNT said he had given three or four injections.

DR. WISE said three or four injections were not enough, he should have given twenty injections.

DR. MOUNT said he gave 25 c.c. of serum.

DR. SATENSTEIN said it made no difference how much blood was drawn or how much serum was injected.

CARCINOMA ON A SYPHILITIC BASE. Presented by DR. ROSEN.

The patient, a man, aged 34, born in Russia, gave a history of an initial lesion fifteen years ago, with secondaries. He had been treated with mercury injections for about one year at the time. For eight or nine years past he had noticed a peculiar condition of the tongue; being painful the past two years. On admission to the Vanderbilt Clinic one year ago the tongue showed a marked interstitial glossitis with slight ulceration on the outer edge opposite the second molar tooth. The patient also showed a markedly positive globulin, 23 cells, a ++++ Wassermann down to 0.2 and a paretic curve (5555543000). His pupils were markedly irregular and reacted very sluggishly to light. Accommodation was normal. He received two courses of arsenobenzol, and mercury injections, eight of the former and twelve of the latter in each course. His condition improved; and he did not return to the clinic for about two months. During this time the ulceration on the edge of the tongue increased in size until it was about the size of an almond, with raised edges and markedly infiltrated base.

DISCUSSION

DR. OCHS recalled a case of Dr. Sauer's, a colored man, with a supposed gumma of the tongue, but really an epithelioma, who was given six or eight arsphenamin (salvarsan) injections. The speaker saw the patient a short time ago and his tongue was very much worse; the epithelioma greatly increased in size, and he had probably died since that time. The speaker warned about the use of arsenic in tongue lesions.

DR. SATENSTEIN asked if the diagnosis had been decided on as epithelioma.

DR. OCHS said he thought the case was epithelioma.

DR. ROSEN said he agreed with Dr. Ochs in regard to the use of arsphenamin (salvarsan) in tongue lesions. In such lesions one had to be careful in the use of arsenic.

HYDROA VACCINIFORME. Presented by DR. BECHET.

The mother stated that the child was 18 months of age and had had recurrent attacks of the eruption since birth. The eruption was entirely confined to the face, particularly the cheeks and ears. The course of the disease as observed by the speaker was as follows: The lesions, pea to dime-sized, were at first vesico-bullous, filled with clear serum, which soon became milky in color; the lesions drying down, forming a rather thick crust, which on dropping off left a reddened area, which later formed an indented scar. On the night of presentation the end-process of the eruption was most prominent, some of the lesions were crusted, in others the crusts had come off leaving reddened areas, in which scarring was clearly noticeable.

DISCUSSION

DR. SATENSTEIN made a diagnosis of ordinary impetigo which had been maltreated.

DR. WISE said he thought Dr. Bechet's diagnosis had to be seriously considered. It was a difficult case to decide on because the condition was usually seen in older patients. The child had not had time to develop atrophic and parchmentlike lesions. The general appearance was in favor of hydroa vacciniforme but it would be impossible to make that diagnosis in the stage in which the disease was at the time of presentation, although the speaker said he favored that in preference to any other.

DR. BECHET said that an ordinary impetigo was the first diagnosis, but in view of the history, the course of the disease, the scarring, the persistence of the lesions recurring in attacks, it seemed to him that hydroa vacciniforme was the most plausible diagnosis.

ERYTHEMA NODOSUM AND MOLLUSCUM CONTAGIOSUM. Presented by DR. OCHS.

There was nothing unusual about this case except the combination of erythema nodosum with molluscum contagiosum on the body. The erythema nodosum was of three weeks' duration. The molluscum involved the back and anterior part of the body. The site was unusual as it usually occurred around the mouth. The erythema nodosum was extensive as it extended from the upper part of the thighs down to the ankles and was very painful.

DISCUSSION

DR. SATENSTEIN said he thought the lesions were thrombotic in character and would probably become gangrenous. He did not think it was an ordinary type of erythema nodosum.

DR. WEISS said in erythema we found thrombosis due to toxins circulating in the blood, acting as irritating substances to the skin and causing the peculiar eruption with an occasionally slight gangrenous condition. In erythema nodosum gangrene was rarely seen but the thrombosis of the capillaries explained the pains when present.

DR. WISE said they were typical lesions of erythema nodosum and he doubted if any of them would break down.

DR. OULMANN said he agreed with Dr. Wise.

DR. OCHS said the child had a distinct history of rheumatism. He had never seen one of these cases ulcerate, differing thus from erythema induré (Bazin).

CASE FOR DIAGNOSIS. Presented by DR. OCHS.

The patient developed a brownish papule, lentil-sized, on the left side of the nose four years ago, which he took to be a wart. It was only slightly itchy and he scratched it. A scab formed and fell off, leaving a central depression, the ring so formed flattened out and began to cicatrize, leaving a depressed circular scar, and other new lesions appeared. When presented before the Section the entire upper part of the face was studded with light rose to brownish papules varying in size from pinhead to a lentil and also lesions at the end of their evolution. The evolution apparently consisted in the appearance of a small papule which grew to the size of a lentil, then the center would become depressed and a scab would form which would drop off, leaving a circular depressed scar. Such a lesion was seen alongside of the nose which corresponded in size to that of the original lesion. The patient stated that he had a brother and sister in Saranac with tuberculosis. The patient had recovered from an attack of typhoid a few days before presentation and was to leave the following day to visit his brother and sister at Saranac. The evolution of a lesion required about two or three months.

DISCUSSION

DR. FOX said this was a case in which the diagnosis of multiple benign cystic epithelioma could be made.

DR. MOUNT said it was one of three conditions and it would require a microscope to settle the question. The lesions were either colloid degeneration of the skin, benign cystic epithelioma or some form of tuberculous process, while not directly due to the bacillus, perhaps some tuberculid affair.

DR. OCHS said the patient was not suffering from tuberculosis.

DR. ROSEN said he would make a diagnosis of benign cystic epithelioma undergoing epitheliomatous degeneration.

DR. SATENSTEIN said his recollection of benign cystic epithelioma was that once established, if they disappeared they did not leave any scars behind.

Ordinary epithelioma did not take this course. There was a tuberculous type of sarcoid which disappeared and took the course of tuberculids and some of these lesions were following that course. He thought it was a type of sarcoid.

DR. FOX said there was an epidemic of sarcoid now as there was of dermatitis herpetiformis years ago when everything that we could not recognize was called by that name. He said he would not think of sarcod in this case.

DR. WISE thought the eruption was an unusual form of tuberculosis.

DR. FOX said he considered the case as cystic epithelioma of the benign form. There were one or two waxy lesions and he would regard those as typical of epithelioma.

DR. PAROUNAGIAN asked if it would not be well to take a Wassermann test.

DR. OCHS said when he saw the patient the day before presentation he thought it was epithelioma but after examining him more carefully he was inclined to consider it as tuberculous. He ruled out benign cystic epithelioma. Although the lesions had gangrenous centers and formed scar tissue, yet when they did the scar did correspond to the original lesion. The patient's mother was a nurse and gave a lucid description of the course and she was positive that the lesion on the side of the nose was the exact size of the original lesion. Each lesion started as a small papule, pinkish in color, changing to brown. There was a central depression similar to acne varioliformis. When the necrotic area filled out it looked like a doughnut and that in turn disappeared and left a scar. This was not the description of epithelioma. The speaker regarded the case as in the category of tuberculosis.

DR. ROSEN said the patient had lesions under the eyelids which were typical of benign cystic epithelioma with waxy appearance and telangiectasia and in certain locations a tendency toward coalescing. He could not conceive of them being characteristic of tuberculids. The peculiar part was the course which they assumed. He made a diagnosis of benign cystic epithelioma undergoing malignant degeneration. The microscope would settle the question. *

TUBERCULOSIS VERRUCOSA CUTIS. Presented by DR. WISE.

The patient, V. M. R., aged 33, an unmarried man, presented a large patch of infiltrated, crusted and inflamed skin, involving the inner half of the right buttock and intergluteal region. The disease started eight years ago, as a fissure in ano and gradually extended from the anus to the surrounding skin of the buttock and perineum. The surface of the patch presented the characteristic verrucous and crusted appearance, with small areas of suppuration scattered here and there.

FOLLICULITIS DECALVANS. Presented by DR. WEISS.

The patient had lesions on the scalp with deep atrophic scars; also recent lesions on the occipital part of the head.

DISCUSSION

DR. WISE said he doubted if the diagnosis was correct. He thought it was acne varioliformis.

DR. BECHET said that he agreed with Dr. Wise. He had seen one case of folliculitis decalvans, and the appearance of the lesions in that case was totally different from the one under consideration. He was under the impression that folliculitis decalvans was a follicular and perifollicular inflammatory process, spreading peripherally, and leaving in the center scarred areas, with little or no hair growth. Dr. Weiss' case simply presented the ordinary type of premature baldness, with a dozen or so reddened papules, many of which

* The microscopic examination, later, revealed a basal cell epithelioma.

had necrotic centers. There were a few variola-like scars on the temples. It was his opinion that the case was one of ordinary alopecia, complicated with acne varioliformis. He considered acne varioliformis and folliculitis decalvans as distinct clincal entities.

DR. FOX said it was a folliculitis whether it was called acne varioliformis or sycosis. It was not a typical case of folliculits decalvans.

DR. WEISS said he made this diagnosis because the patient had two new patches with follicular involvement and as far as he knew they were similar processes. Dr. Wise said there was a great difference between folliculitis and acne necrotica. He would be glad to know the differential points.

LUPOID FOLLICULITIS (?) PAPULONECROTIC TUBERCULID. Presented by DR. WEISS.

The patient, a male adult, had had the condition for six years. He stated that on a rainy night he slept outdoors under a pile of rails and that the rust and water fell on his face. There were lesions which resembled papulonecrotic tuberculids, starting at the left nostril and extending in a semicircular way to the chin.

DISCUSSION

DR. WISE considered it as ordinary sycosis.

DR. MOUNT thought it was sycosis.

DR. WEISS said the sycosis described as follicular did not show lesions from the nose to the chin, at the base of which there was pus formation.

LUPUS TUMIDUS OF LUPUS VULGARIS TYPE. Presented by DR. WEISS.

The condition had been present fourteen years. On the right cheek there was a lesion which had disappeared for two years without having had any treatment, then reappeared on the forehead and extended to the cheeks, ears and nose. There were also numerous apple-jelly like nodules visible under the mucous membrane of the lower lip. The patient had been treated at the Skin and Cancer Hospital with salves, at the Polyclinic for one year with carbon dioxid snow and at Bellevue with pastes. The speaker had given him four doses of roentgen ray up to the point of a dermatitis, under which the condition had improved very much. The speaker said that which made him think of lupus vulgaris was the lesions on the lower lip which showed distinctly small apple-jelly nodules on the mucous membrane. While the configuration and scaling pointed toward lupus erythematosus, yet the deep infiltration and the nodules on the lip made one think of the possible presence of both conditions.

Review of Dermatology and Syphilis

Under the direction of Fred Wise, M.D., New York
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ANNALES DES MALADIES VENERIENNES

(April, 1918, 13, No. 4)

Abstracted by Paul E. Bechet, M.D.

SCLEROTIC SYPHILITIC MYOSITIS OF THE LONG MUSCLES. Levy-Franckel, p. 193.

The author reports three instances of the disease. In all three the thigh muscles were involved. The condition proved to be a diffuse sclerosis involving the entire muscle, with absence of necrosis or gummatous change. It occurred late in two cases, eighteen years in one, twenty years in another; the third case appeared only three years after the chancre. Levy-Franckel found the lesion rare, it occurred only three times among 259 cases of tertiary syphilis, observed over a period of one and one-half years. It was exceedingly rebellious to treatment.

MASKED SYPHILIS. Dreyfus, p. 199.

Dreyfus under this title reports the following interesting cases: (*a*) Acute polyarticular rheumatism, with pleurisy, and endocarditis, in a girl of 20. Intensive antirheumatic treatment gave no results. The Wassermann in the blood and serous fluid from the pleural cavity was strongly positive. Spirochetes were found in the centrifugalized fluid from the pleural cavity. There was a complete cure after specific treatment. (*b*) Varicose ulcers. Man, aged 66, with extensive ulcerations on both legs, of ten years' duration. These were unsuccessfully skin grafted. The multiplicity of the ulcers, absence of varicose veins in the right leg, enlargement of postcervical glands, and positive Wassermann reaction, indicated the nature of the disease. (*c*) Chronic articular rheumatism in a woman, aged 61, of ten years' duration, with tendency to deformation. Various baths, health resorts, roentgenotherapy, etc., were without result. The patient stated that the pain became aggravated at night. The Wassermann reaction was positive. There was immediate cure under specific treatment. (*d*) Anal fissures in a girl of 23, without any of the stigmata of heredo-syphilis, other than a certain asymmetry of the face and separation of the upper incisors. The patient had always been well, but since very early childhood had had extremely sensitive and painful anal fissures. The Wassermann reaction was positive. Immediate cure followed antisyphilitic treatment. (*e*) Scrotal tongue and macroglossia. Heredo-syphilitic? Ozena and chronic gastritis in a young woman of 26, of years' duration. She was

married four years, and had had no miscarriages or children. There was no history or evidence of former syphilis. A sister had typical Hutchinsonian teeth. The Wassermann reaction was positive in both cases. Under treatment the ozena (after the discharge of sequestra) and the gastritis disappeared entirely. The father admitted having contracted syphilis years previously. (*f*) Hypertrophic alcoholic cirrhosis of the liver (Hanot-Gilbert). The patient had been tapped six times, ten different medical advisers had given a fatal prognosis. A seventh paracentesis was made, and twenty liters of fluid were removed. The patient was apparently moribund, with typical jaundiced facies, and presented for examination a greatly enlarged liver, covered with tumors of variable size and hardness. He complained of intense and persistent nocturnal headache. The patient freely admitted alcoholic indulgence, but denied venereal infection. The Wassermann reaction being positive he was reinterrogated, and then remembered having had a small painless lesion on the lower lip twenty years previously, followed by enlarged cervical glands and sore throat. He had never had any eruption on the body. Syphilitic treatment brought about complete recovery.

REFLECTIONS, PROPHYLACTIC AND MEDICAL. CARLE, p. 216.

PROCEEDINGS OF THE ROYAL SOCIETY OF MEDICINE

(March, 1918, 40, No. 5)

Abstracted by WILLIAM H. GUY, M.D.

ACNE KELOID. E. G. GRAHAM LITTLE, p. 29.

A rather extensive case with two types of lesions: an early perifollicular plug of blackened and hardened tissue, looking very much like an acne comedo, but differing in that the plug cannot be expressed, and the second type of lesion being a hard shotty papule raised about ⅛ inch above the level of the surrounding skin. In some of the lesions a small bead of pus was visible. The onset of the condition was unusually rapid and the involvement extensive, lesions being noted throughout the scalp. The nape of the neck was free of lesions. In discussing the case Dr. Whitefield suggested that it was a case of acne indurata rather than acne keloid.

LUPUS VULGARIS, WITH CUTANEOUS HORNS. W. KNOWSLEY SIBLEY, p. 54.

A case of fifteen years' standing with multiple cutaneous horns in the center of lupus vulgaris lesions situated near the left side of his mouth.

KELOID. S. E. DORE, p. 56.

An extensive keloid involving the face of a child. The growth had formed in the site of a dog bite five years before, and was slowly enlarging. For treatment the application of radium was recommended.

AMERICAN JOURNAL OF THE MEDICAL SCIENCES

(January, 1918, 155, No. 1)

Abstracted by R. C. JAMIESON, M.D.

SOME POINTS RESPECTING THE LOCALIZATION OF SYPHILIS ON THE AORTA. OSKAR KLOTZ, p. 92.

Klotz' reasoning would indicate that the aorta is so frequently involved in syphilis on account of its vascularity and abundant lymph supply as well as

its proximity to lymphatic supply glands and a lymphatic drainage bed which is in the mediastinum. This metastasis is not accounted for except by the biologic properties of the organism and favorable conditions for growth in that location.

(*Ibidem, February, 1918, 155, No. 2*)

CHEMICAL ANALYSES OF THE STOMACH CONTENTS FROM ONE HUNDRED PELLAGRINS. M. H. Givens, p. 221.

These analyses showed that there was no definite relation between the absence of pepsin and free hydrochloric acid and sex, age, duration of pellagra and clinical symptoms, children showing the same general changes as adults although they do not have an absence of free hydrochloric acid and pepsin as frequently as the latter do.

The acid and pepsin do not always disappear together and they are probably present more often than has been expected.

(*Ibidem, March, 1918, 155, No. 3*)

SYPHILIS OF THE LUNG. H. Lisser, p. 356.

Syphilis of the lung, while uncommon, is not so rare as generally believed. It is very difficult to diagnose clinically as the evidence is not typical, but it should be ruled out in all cases of pulmonary disease with negative sputum. Treatment on antisyphilitic lines gives remarkable results.

UNSUSPECTED SYPHILIS. J. S. McLester, p. 320.

McLester reports the results of 567 Wassermann reactions made on consecutive patients, all of them seen in consultation in private practice among a well-to-do class; 16.5 per cent. were positive, 1.3 per cent. had clinical evidence with a negative Wassermann. Of ninety-four positive reactions, thirty-six admitted infection or had a suspicious history, fifty-eight had no suggestive history.

Among these cases were found aortic aneurysm, aortitis, skin and throat lesions, paroxysmal hemoglobinuria, neuroretinitis, cerebrospinal fluid changes, gastric and duodenal ulcers. He believes the routine use of the Wassermann test in private practice fully justified.

(*Ibidem, April, 1918, 155, No. 4*)

THE RELATION OF CONGENITAL SYPHILIS TO MENTAL DEFICIENCY. W. H. Higgins, p. 549.

Of fifty cases admitted to the psychological clinic, twenty-one, or 42 per cent., gave a positive Wassermann reaction. General health was good although all had dental caries, and other abnormalities. Mentality was delayed from two to eight years, the ages of the cases varying from 7 to 16 years.

THE RELATION OF LUPUS ERYTHEMATOSUS DISCOIDES TO TUBERCULOUS INFECTION. R. S. Weiss and J. J. Singer, p. 528.

Twelve patients who had lupus erythematosus discoides are presented and who also had evidence of tuberculous infection. The authors found 41.7 per cent. of their patients had a family history of tuberculosis; forty-nine out of fifty cases reacted positively to tuberculin. These facts, however, do not necessarily mean that there is a direct relationship between lupus and tuberculosis as cases of lupus erythematosus have been benefited by intravenous injections of typhoid and colon vaccine.

Eighty-three per cent. of their cases showed clinical evidence of tuberculosis, but in only one case definitely tuberculous was there any probability of a tuberculous toxin in the circulation.

They hold that, with the evidence on hand, no proof has been offered that there is a relation between lupus erythematosus discoides and tuberculous disease.

JOURNAL OF TROPICAL MEDICINE AND HYGIENE

(October 15, 1917, 20, No. 20)

Abstracted by R. C. Jamieson, M.D.

NOTES ON A CASE OF ESPUNDIA AND THREE CASES OF KALA-AZAR IN THE SUDAN, TREATED BY THE INTRAVENOUS INJECTION OF ANTIMONIUM TARTARATUM. J. B. Christopherson, p. 229.

Three types of Leishmaniasis were found in the Sudan—cutaneous or oriental sore; mucocutaneous, naso-oral or espundia; general or kala-azar; the second type producing a great destruction of tissue and subsequent deformity.

Within a week after starting injections in the case of espundia, the ulcers had become healthy and granulating with healing edges. The treatment consisted of antimony tartrate, ½ grain in distilled water, injected intravenously the first two days; 1 grain in double the quantity of water on the third, fourth and fifth days, with 2 grains on the sixth day and then repeated every other day. Later the dose was increased to 3 grains. Cure was effected in six weeks as shown in photographs.

In the three patients who had kala-azar, one recovered and two died, the deaths, however, occurring in cases unsuitable for treatment. These two patients were markedly emaciated, anemic and jaundiced with much enlarged liver and spleen. Splenic puncture and smear will show the Leishman-Donovan bodies.

GENERALIZED VACCINIA IN SUDAN NATIVES. A. J. Chalmers and R. I. Archibald, p. 236.

Two types are described—a mild, vesicular eruption, appearing about the twelfth day after vaccination, lasting for nine days, and a generalized papular eruption appearing in crops, beginning twenty-two days after vacciation. The latter cleared up in about two weeks. Photographs of the eruptions accompany the article.

(Ibidem, October 1, 1917, 20, No. 19)

LOCALIZED GANGRENOUS VACCINIA. A. J. Chalmers and R. G. Archibald, p. 217.

This case, vaccinated in the usual aseptic manner, developed an area of localized gangrene 2 inches in diameter. This began three days after vaccination and gradually extended up to the ninth day and was accompanied by a temperature of 102 to 105 F. After two weeks an attack of acute gout came on and lasted one week. This type of gangrene is not septic but vaccinal in origin. Local treatment was employed, calamin lotion without dressings giving the most satisfactory results.

NOTES ON TROPICAL DISEASES MET WITH N THE BALKANIC AND ADRIATIC ZONES. A. Castellani, p. 219.

Dermatitis interdigitalis, due to the epidermophyton cruris, is a very common disorder especially among soldiers. The usual methods of treatment are successful if persisted in. Dhobie itch (tinea cruris) is also very common, tinea capitis rare, tinea corporis is frequently seen as well as tinea barbae.

Prickly heat is very common in soldiers and the author has had good results with the use of a lotion similar to calamine lotion with the addition of salicylic acid and alcohol.

Pyogenic conditions, especially impetigo, are very frequent, while tropical ulcers are rather rare.

Other conditions observed are trichomycosis flava, nigra and rubra; Madura foot; intertrigo saccharomycetia, saccharomycosis epidermica; aspergillosis of the beard; trichosporosis; blastomycosis; sporotrichosis; accladiosis; leprosy; trench foot; ainhum; dermatosis festonata frontalis; dermatosis nigro-circinata; keratosis; keratoma plantare sulcatum.

(*Ibidem, July 2, 1917, 20, No. 13*)

ESPUNDIA IN THE ANGLO-EGYPTIAN SUDAN. B. J. SUSU, p. 146.

Report of a case of ulceration of the upper lip and nose due to the presence of Leishmania tropica.

(*Ibidem, Sept. 1, 1917, 20, No. 17*)

SCARLET FEVERLIKE ERUPTIONS IN THE TROPICS. A. J. CHALMERS and ARTHUR INNES, p. 19.

Eruptions appearing in malarial and dengue fever as well as in persons taking quinin are commonly classed as "erythema scarlatiniforme." One case is described in which a tonsillar infection had taken place with rise of temperature up to 104.4 F. on the sixth day, followed by an erythematous eruption of general distribution. A peculiar organism was found in the tonsil. The tongue was not a strawberry tongue.

True scarlet fever was seen only once by the authors in twenty years and others report similar experiences.

(*Ibidem, Feb. 1, 1917, 20, No. 5*)

ACANTHOKERATODERMIA PRAECORNUFACIENS. A. J. CHALMERS and S. ATIYAH.

The case described in this article is one of hyperkeratosis of the feet and hands as well as some involvement of the nail beds of both hands and feet. The condition had existed for twenty-five to thirty years, with occasional breaking down of the tissues with painful fissures.

Pathologic examinations were made of sections from each area involved, a most minute description being given (not adapted to abstracting).

(*Ibidem, June 1, 1917, 20, No. 11*)

KERATODERMIA PUNCTATA. A. J. CHALMERS and A. KAMAR, p. 121.

This condition occurred in an Arab woman hairdresser with no history of syphilis. The lesions covered both palms and appeared to be rounded pits sunk into the epidermis. The horny layer of the skin becomes heaped up around a sweat duct orifice, coalesces with others and forms a translucent cupola which may exude fluid. A deep, cone-shaped horny plug forms which separates and leaves a deep cavity with undermined edges. The appearance of the skin in the photograph has a resemblance to a variolous skin.

The etiology was unknown unless it could have been due to some internal toxemia—possibly the absorption of arsenic. Disinfection of the alimentary canal with the application of salicylic acid and resorcin locally is recommended.

(*Ibidem, Nov. 15, 1917, 20, No. 22*)

NOTE ON THE VALUE OF ARSPHENAMIN (SALVARSAN) IN RELAPSING FEVER AND MALARIA. W. L. PEACOCK, p. 254.

It is concluded that arsphenamin (salvarsan) is useless in relapsing fever in single doses, but it could possibly be of value if it could be given on the first day. It should also be used cautiously.

In malignant malaria, Peacock believes the drug has a stimulating effect, certainly producing no cure.

NEW YORK MEDICAL JOURNAL

(Dec. 17, 1918, 106, No. 22)

Abstracted by C. C. TOMLINSON, M.D.

DEATH IN TABES DORSALIS. MORRIS GROSSMAN, p. 1029.

The author's conclusions, made from a study of 240 undoubted cases of tabes, are as follows:

1. The cause of death in tabes is syphilis.
2. Syphilis and tabes led to death through cardiovascular and renal degeneration and through weakened resistance to nonsyphilitic infections.
3. The probable average age at which death occurs is 53 years.
4. The mortality among tabetics over 53 years of age is 238 per thousand.
5. Tabes is as nonlethal as any form of syphilis.

WASSERMANN COMPLEMENT FIXATION TEST FOR SYPHILIS. J. WHEELER SMITH, JR., p. 1030.

A synopsis of the studies of different serologists on the choice of the antigen, which would seem to show that a simple alcoholic antigen, with the first incubation carried out in the icebox for from four to twenty-four hours, gives the most trustworthy evidence of syphilis.

(Ibidem, Jan. 12, 1918, 107, No. 2)

THE NEW PATHOLOGY OF SYPHILIS. A. S. WARTHIN, p. 71.

A summarized report of a study covering a period of ten years and including 750 necropsies which revealed 300 cases of syphilis. A similar study recently reported from Bellevue Hospital showed but 6.5 per cent. syphilis, whereas the author's study shows 40 per cent. syphilis. The discrepancy is explained by the use of different criteria for diagnosis. The criteria in the former study were those of gross anatomic lesions such as aortitis, aneurysm, gummas, etc., whereas the author of this article included those cases presenting a special type of lesion which he thinks shows sufficient proof of its specific nature. The nature of the lesion found in the various tissues is described as appearing edematous under low-power magnification, and under high-power magnification showing varying degrees of infiltration with fibroblasts and plasma cells. Differential staining also shows varying amounts of mucin. Each of these lesions was found to be the site of a colonization of spirochetes. They were found in acquired as well as in congenital syphilis. The size of the lesion varied from a minute collection of a few cells to those just visible to the naked eye. Spirochetes were demonstrated in 75 per cent. of the 300 cases. The majority of the 300 hundred cases had not been suspected of syphilis during life and a large proportion had given negative Wassermann reactions. The cases were from the better elements of the middle class. The findings would indicate a high percentage of latent syphilis and explain a large proportion of chronic organic disturbances with ill-defined etiology.

WASSERMANN COMPLEMENT FIXATION TEST FOR SYPHILIS. J. WHEELER SMITH, JR., p. 55.

A very vivid description of the different agents composing the hemolytic system, with a detailed description of the methods used in their preparation. Two schematic representations illustrate the reaction in both negative and positive serum.

(*Ibidem, Feb. 9, 1918, 107, No. 6*)

RAYNAUD'S DISEASE. GEORGE RUBIN.

Report of a case of the disease, in an unusual location.

(*Ibidem, March 9, 1918, 107, No. 10*)

ECZEMA DUE TO DEFICIENT THYROID SECRETION. (REPORT OF A CASE IN WHICH THE ADMINISTRATION OF THYROID EXTRACT ACTED AS A SPECIFIC.) M. H. EDELMAN, p. 450.

The author's patient was a boy, aged 3½ years, who had had extensive eczema since he was 4 months of age. Various modifications of diet and local treatment had been of no benefit, but the patient improved rapidly under treatment with thyroid extract and was entirely well in three months.

(*Ibidem, March 16, 1918, 107, No. 11*)

WASSERMANN COMPLEMENT FIXATION TEST FOR SYPHILIS. J. WHEELER SMITH, JR., p. 489.

This is the third of a series of articles the author has written on the Wassermann reaction and deals with the preparation and titration of the antigen, preparation of the patient's serum and technic of the test.

MEDICAL RECORD

(*March 2, 1918, No. 9*)

Abstracted by C. C. TOMLINSON, M.D.

CANCER DEATH RATE IN NEW YORK CITY DURING 1917. L. DUNCAN BULKLEY, p. 362.

Statistics quoted by the author show a marked increase in the mortality rate of cancer, which fact he believes proves that surgical treatment, which has been given first place, is a failure and that we should turn our efforts to the general medical treatment of this disease.

AMERICAN JOURNAL OF SYPHILIS

(*January, 1918, 2, No. 1*)

Abstracted by C. C. TOMLINSON, M.D.

THE INTRAVENTRICULAR TREATMENT OF PARESIS. NORMAN SHARPE, p. 1.

Owing to the thickened condition of the arachnoid in paretics, subdural injections are prevented from penetrating to the cortex. Dogs injected in this manner with a staining solution showed staining only on the side injected, with no penetration to the depths of the sulci or ventricular system. When injected into the lateral ventricles, staining was produced over the entire cortex of both brain and cord including the ventricular system, and extending to the depths of the sulci and forward to the olfactory bulbs and retrobulbar

spaces of the eye. Following these experiments it was then determined to inject arsphenamin (salvarsan) into the lateral ventricles of paretics and the results of these injections on the first thirteen cases is reported. The amount of arsphenamin (salvarsan) used varied from 0.6 to 1.8 mg., with no unfavorable reaction other than an occasional headache or slight rise in temperature. Three injections were given each patient at intervals of three weeks; this was followed by a rest period of several weeks when further treatment was determined by an examination of the fluid. Two advanced cases were unimproved and died several months after the final injection in the terminal stage of paresis. Two others showed no improvement and nine showed decided improvement, chiefly clinical, five of them being able to return to work following three injections. Fluid findings other than the gold chlorid test became negative. The gold chlorid test always showed a typical paretic curve. The author concludes that this treatment is exceedingly valuable in early cases, but should not be used where deterioration is marked.

SYPHILIS OF THE INNER EAR AND EIGHTH NERVE. GEORGE W. MACKENZIE.

Syphilis of the inner ear and eighth nerve is a far greater cause of deafness than is generally credited. Deafness in children suffering from congenital syphilis is quoted to occur in from 33 to 60 per cent. of cases, and a positive Wassermann reaction has been found in one third of the cases of nerve deafness of unexplained origin. The eighth nerve is less resistant to the poison of syphilis than the other cranial nerves. The trouble is as a rule bilateral. Primary bilateral internal ear or nerve deafness in the absence of a history of basal skull fracture or meningitis is almost invariably due to syphilis. Unilateral syphilis is rarely the cause. The course of labyrinthine syphilis in acquired cases is rapid, complete deafness developing as early as one week following the onset. In the congenital form the course is more gradual. The history and clinical findings are such as to render a diagnosis comparatively easy. Active treatment with arsphenamin (salvarsan), mercury and potassium iodid, commenced before the functions have been destroyed, has the same beneficial effect as on active lesions elsewhere in the body. It is not thought that there is danger of exciting pathologic changes in the optic and acoustic nerves from the arsenic in arsphenamin (salvarsan). The author describes the various diagnostic methods, also the pathologic changes involved.

SYPHILIS OF THE EAR. VIRGINIUS DABNEY, p. 26.

The subject is divided into the acquired and congenital forms and the former subdivided into: (1) cutaneous syphilis of the external ear; (2) syphilis of the eustachian tube and middle ear, and (3) syphilis of the inner ear. Primary syphilis of the external ear is rare, secondary manifestations, however, are not uncommon and the external ear may be the seat of gumma formation. All three stages of the disease may attack the eustachian tube, and it is thought that the tympanum may share in the eruptive phenomena of the secondary stage. Regarding the inner ear, the author is of the opinion that 5 per cent. is a reasonable estimate of aural disturbances in constitutional syphilis. Fifty per cent. of aural disturbances occur during the secondary period. Owing to the freequent association of similar disturbances of other cranial nerves, it is considered probable that the deafness is not due to infection of either the labyrinth or eighth nerve, but to involvement of the nerve in a syphilitic meningitis. In early cases marked improvement in hearing has followed the use of intraspinal treatment. Sudden loss of hearing, generally with tinnitus, with no pain, and no evidence of middle ear disease, in an otherwise healthy young adult, is invariably due to syphilis of the eighth nerve and labyrinth. Shortening of bone conduction is the most

reliable evidence of syphilitic infection. The trouble is usually bilateral. The author agrees with West's division of congenital syphilis into three classes, as follows: (1) Cases showing gross aural disease at birth; (2) cases showing aural disease shortly after birth, and (3) cases showing aural disease at or after adolescence. Diagnostic methods in the last two classes are given. Intensive treatment is urged with recourse to the intraspinal method in cases of keratitis or sudden deafness.

SYPHILIS AND MALIGNANCY. Burton Peter Thom, p. 40.

A brief review of the literature on the frequent association of malignant disease with syphilis. The author summarizes as follows:

1. Syphilis predisposes to malignant disease.

2. The most malignant forms of syphilis and cancer may exist side by side—the so-called juxtasyphilitic carcinoma or epithelioma.

3. In a syphilitic developing cancer there is almost certain to be a local outbreak of the syphilitic disease in close proximity to the malignant growth.

4. In an individual with cancer who contracts syphilis, the malignant disease is stimulated to increased activity.

5. Leukoplakia occurring in syphilitics, especially if tobacco is used to excess, almost invariably develops into cancer of the mouth or tongue.

6. Epithelioma or carcinoma may develop on a gumma, the two lesions merging, as it were.

7. Syphilis may exactly simulate cancer in any location, either of the viscera or on the surface of the body.

SYPHILITIC AORTITIS. Louis A. Levison, p. 45.

Two hundred and fifteen cases with syphilis in all stages were studied from a clinical standpoint with a diagnosis of aortitis or allied conditions in twenty-four, or 11.1 per cent. The author's summary follows: Syphilitic disease of the aorta is a much more common affection from the pathologic point of view than from the clinical. Necropsy studies show a much greater incidence of aortitis than clinical findings. The disparity between these findings should lead to an endeavor to bring the clinical findings to a point more closely approximating the pathologic percentage. Syphilitic aortitis should be specifically looked for in every patient who has had syphilis without waiting for symptoms and signs to become prominent. Syphilitic aortitis is present in from 5 to 10 per cent. of all patients having syphilis. It is more common between the ages of 30 to 50. The length of time which intervenes between the beginning of infection and the first appearance of symptoms is very variable; it may be but a few months after the initial infection, or the period may be delayed for twenty or more years. The most important symptoms are pain, dyspnea, palpitation, hoarseness, fever and gastric disorders. The physical findings show variable pictures, depending on the location of the lesion, the extent of involvement, and the implication of the large arteries given off from the aortic arch. The roentgen ray is the most important method of determining the dilatation of the aorta. Physical signs can almost always be determined before the appearance of dilatation. The course of the disease is variable, and may run a prolonged period of inactivity or latency. When symptoms appear, the condition becomes at once more serious. The average duration of life after symptoms appear is from three to five years. The treatment of aortitis is the treatment of syphilis. It is probable that the intensive treatment of the present day will lessen the evidence of aortitis. Great relief may be expected in a systematic way following treatment, but changes in the physical signs or anatomic conditions very rarely occur. Caution should be used in giving large doses of arsphenamin (salvarsan) in the presence of aortitis, on account of the appearance of severe reactions.

CONDYLOMA OF THE UMBILICUS. A. G. RYTINA, p. 64.

A review of the literature on syphilis of the umbilicus with a report of a case of condyloma of the umbilicus, associated with condyloma of the anus. The patient had been wearing a belt around the umbilicus and it is thought the irritant action from the belt was predisposing. Spirochetes were obtained from the lesion. The umbilicus is very rarely involved in a syphilitic process.

MASSES IN THE NECK. ISIDORE COHN, p. 67.

A study of the differential diagnosis of masses in the neck, with a number of case histories and photographs. The author's conclusions are:

1. When a neck mass presents itself, many possibilities must be considered before jumping at conclusions.

2. The clinical laboratory should be utilized early if many of these cases are to be benefited by treatment of any kind.

3. Congenital cysts are to be differentiated from tuberculous glands, in children especially.

4. Carotid body tumors must be considered if a patient presents himself with a painless, nonpulsating, firm mass occupying the course of the carotid artery.

5. A history of the mass having been present for several years is suggestive of a carotid body tumor.

6. Primary neoplasms of lymph glands are most often of the round-celled sarcoma type.

7. Hodgkin's disease is often mistaken for other conditions.

8. The diagnosis is dependent on clinical laboratory findings.

9. Tuberculous cervical adenitis and hyperplastic gland masses due to syphilis are often confused.

10. The removal of a single gland for examination, the Wassermann test, and other laboratory methods will avoid many needless cervical adenectomies.

TATTOOING AND SYPHILIS. ALBERT KEIDEL and E. L. ZIMMERMANN, p. 83.

Regarding the influence of tattooing in syphilitic eruptions the authors report a patient who had been extensively tattooed in 1908. In 1916, the patient developed a chancre and six weeks later an eruption which has remained until the present time. The eruption, which was pinhead to dime-sized, scaly and papular, showed distinct preference for dark colored areas and a striking absence in the areas containing cinnabar pigment. In only one instance was the eruption present in areas containing this pigment. The patient was given one injection of diarsenol after which he failed to return, thus rendering further study impossible. Theorizing on the influence of tattooing, the author remarks that, "Puncturation of the skin of a syphilitic, by causing cell death, produces favorable cultural conditions for the *Spirochaeta pallida,* and by interference with skin metabolism alters the nutrition of the cells. One tends to increase the virulence of the infection, the other tends to lower the resistance of the cells opposed to it. The deposition of the pigment acting as a foreign body also diminishes cell resistance. These local influences so favor the spirochetes at the expense of the tissues that the protective property of a pigment like cinnabar, is incapable of successfully opposing the invader."

SKELETAL RADIOGRAPHY AS AN AID TO THE DIAGNOSIS OF OBSCURE SYPHILIS. WILLIAM PEARCE COUES, p. 97.

Emphasis is placed on the importance of radiography in the diagnosis of obscure syphilis. Definite radiographic findings, proved specific by patho-

logic examination of tissue and the therapeutic test, are not always supported by a positive Wassermann reaction. In fact, the author has found a greater percentage associated with a negative Wassermann reaction. A number of roentgenograms, showing changes due to syphilis, accompany the article.

THE BLOOD AND CEREBROSPINAL FLUID IN THREE HUNDRED KNOWN CASES OF SYPHILIS. CHARLES CLAYTON DENNIE and D. O. SMITH, p. 101.

A study of the blood and cerebrospinal fluid in 300 cases of syphilis, 100 of of which were early and 200 late syphilis. The authors' conclusions are as follows:

1. In primary syphilis, the cerebrospinal fluid was entirely negative in 80 per cent. of the cases and, of the remaining 20 per cent., the findings were very mild.

2. In secondary syphilis, the cerebrospinal fluid was entirely negative in 45 per cent.; 35 per cent. had mild reactions, and 20 per cent. marked findings.

3. In late secondary syphilis, the blood Wassermann tests were 100 per cent. positive; 60 per cent. gave undoubted evidence of meningeal involvement as the cerebrospinal fluid in these cases was markedly positive throughout; 33 per cent. had moderate findings in the cerebrospinal fluids; and only 7 per cent. had entirely negative cerebrospinal fluids.

4. Patients receiving early treatment for syphilis should have an examination of the cerebrospinal fluid before the treatment is finished, as 50 per cent. of the series reported here had positive findings in the cerebrospinal fluid without signs or symptoms of central nervous system involvement.

5. Cerebrospinal meningitis (syphilitic, acute) had the same findings in the cerebrospinal fluid, even to the paretic curve with the gold solution, as paresis.

6. Gummas of the penis did not have marked findings in the cerebrospinal fluid, but the confirmatory type.

7. The phagedenic ulcers reported here were evidently due to late syphilis.

8. Old syphilis without symptoms, treated and untreated, have almost the same findings in the blood and cerebrospinal fluid. One-third show confirmatory evidence of syphilis in the cerebrospinal fluid.

9. Syphilis of the tongue, stomach and liver did not show any evidence of syphilis in the cerebrospinal fluid.

10. The larger percentage of syphilis of the bones and joints shows confirmatory evidence of syphilis in the cerebrospinal fluid.

11. Fifty per cent. of the patients who had syphilis of the skin (old) showed marked evidence of syphilis in the cerebrospinal fluid. This report is decidedly against the old teaching.

12. Raynaud's disease should always be investigated for old syphilis.

13. Congenital syphilis did not show many positive cerebrospinal fluids.

14. Syphilis of the arteries (aortitis, aneurysm) all showed positive cerebrospinal fluids.

15. Patients with optic atrophy all had positive cerebrospinal fluids (evidence of a meningeal involvement).

16. Brain syphilis of the vascular type had mild findings in the cerebrospinal fluid. The chronic basilar meningitic type had marked findings in the cerebrospinal fluid.

17. In cerebrospinal meningitis (old) without signs, 64 per cent. had marked findings in the cerebrospinal fluid, and 28 mild findings; the rest were negative.

18. In paresis all the findings were marked.

19. Transverse myelitis, multiple sclerosis, and progressive muscular atrophy should always be investigated for syphilis.

20. Tabes dorsalis was divided into five groups: (1) Marked findings in both blood and cerebrospinal fluid; (2) positive blood and mild findings in the fluid; (3) positive blood and negative spinal fluid; (4) negative blood and positive spinal fluid, and (5) those showing the paretic curve.

21. The intensity of the serologic findings is an index to the activity of the syphilis.

22. The so-called paretic curve may occur in any gold chlorid test, no matter what type of activity, if the process is very active.

THE TECHNIC OF THE BORDET-WASSERMANN REACTION. A CONSIDERATION OF THE PROBLEM INVOLVED IN ITS STANDARDIZATION. H. K. DETWEILER, p. 120.

This article is the report of a careful study in which the author has reviewed the problems involved in the standardization of the Wassermann reaction. The different components of the hemolytic system are taken up separately, giving the report of other workers with a discussion of their merits. Chief among the author's deductions are the following: Cholesterinized antigen gives the most delicate test and the incubation is carried on in an air thermostat. When alcoholic antigen is used, icebox incubation is a decided advantage. Double the amount of serum in the serum control tube is an additional factor of safety. Natural antisheep amboceptor in serums does not yield false results when not less than 0.1 c.c. of serum is used.

SYPHILIS AND THE WAR. H. H. HAZEN, p. 144.

It is a recognized fact that syphilis increases during war and the five-year period following it. It is therefore important that the necessary steps be taken to protect society at large. Measures provided by various nations to prevent the spread of the disease are reviewed, with comments. In the United States no systematic attempt has been made to decrease the amount of syphilis in either the army or navy, and as a result we stand highest in percentage of syphilis. We must have national control if the desired results are to be accomplished in protecting the civil population.

EFFECT OF VENEREAL DISEASES ON INFANT MORTALITY. FREDERICK H. BARTLETT, p. 156.

It is impossible to get accurate statistics of the effect of syphilis on infant mortality. If stillbirths and miscarriages are included in an estimate of the incidence of congenital syphilis, the number of actual cases are much larger. Stillbirths have been classed as due to syphilis in as high as 50 per cent. of cases. Various statistics are given in this article showing the effects of syphilis on infant mortality and the economic loss through this disease. "An examination of the wastage of life in hereditary syphilis and of the following birth rate in Paris can lead to but one conclusion, that syphilis is a national peril."

ADEQUATE TREATMENT FOR SYPHILIS. H. G. IRVINE, p. 167.

The author states that for several weeks the rate of venereal disease in the draft army has been several times that of the regular army, thus showing the need for more supervision and better treatment among the civilian population. Especially to be condemned is the practice of those engaged in special lines to treat a patient until lesions of various special organs are cleared and then allow the patient to pass from observation. Ideal treatment must be individualized and no general rules can be made further than that the treatment should be carried on intensively with arsphenamin (salvarsan) and mercury. A cure should not be pronounced until after an observation period of two years, during which time numerous blood Wassermann tests and finally a cerebrospinal fluid Wassermann test should be made.

THE TREATMENT OF EARLY SYPHILIS IN RELATION TO DEVELOPMENT OF NEUROSYPHILIS. LAWSON GENTRY LOWRY, p. 138.

Syphilis cases are reported in which the time of infection was known, and in which all of the patients had fairly intensive treatment at the time of infection, but all developed paresis. Intensive treatment resulted in improvement in each of the cases reported. The author deduces the conclusion that early treatment is not a guarantee against syphilis. All cases of syphilis should be punctured early. If intensive treatment will improve a paretic, the same type of treatment given early should go far toward preventing its development.

THE SYPHILIS CLINIC OF EMORY UNIVERSITY. W. B. EMERY, p. 142.

A brief outline of the methods of handling syphilis in vogue at this clinic.

UROLOGIC AND CUTANEOUS REVIEW

(February, 1918, 22, No. 2)

Abstracted by OSCAR L. LEVIN, M.D.

ROENTGEN THERAPY IN EPITHELIOMA. ALBERT F. TYLER, p. 65.

The writer asserts that all epitheliomas without lymphatic involvement should be treated with the roentgen rays. He states that this method of treatment is preferable because it is painless, because it does not interfere with the patient's occupation, and because the ultimate results are as good or better than any other method of treatment. In cases in which the growth has been excised the rays should be employed subsequent to the operation.

THE TREATMENT OF ACNE BY THE ROENTGEN RAY: TREATMENT OF EPITHELIOMA OF THE LOWER LIP BY RADIUM. RUSSEL H. BOGGS, p. 68.

It is claimed that the roentgen ray in the hands of the experienced, when applied in the treatment of acne, is not dangerous and will cure nearly every case of the most severe type.

A case is also reported in which an inoperable epithelioma of the lower lip was cured by radium.

TREATMENT OF MALIGNANT SKIN LESIONS WITH THE ROENTGEN RAY. FREDERICK B. HALL, p. 85.

Accompanying this article there are several excellent photographs showing the curative effects of the rays on epitheliomas and sarcomas of the skin. The writer states that roentgen rays and, to a lesser extent, radium have superseded all methods of treatment with the exception of excision for these conditions. He recommends the roentgen rays as a postoperative measure when excision has been performed.

RADIUM TREATMENT IN DISEASES OF THE SKIN. W. KNOWSLEY SIBLEY, p. 90.

A short description is given of the alpha, beta and gamma radiations from radium, the action of these radiations, the manner of application and technic for the employment of radium. Among the skin diseases which are now satisfactorily treated are: nevus, angioma, lymphangioma, rodent ulcer and

other varieties of skin cancer, Paget's disease, eczema, psoriasis, lupus vulgaris, lupus erythematosus, pruritus, roentgen-ray dermatitis, leukoplakia, keloids, scars, lichen planus, etc. The best results are obtained in rodent ulcer, nevi and keloids, in all of which the lesions have been satisfactorily removed without any obvious scarring being left to mark the site of the original disease.

(*Ibidem, March, 1918, 22, No. 3*)

DERMATOLOGY AND INTERNAL MEDICINE. WALTER JAMES HEIMANN, p. 125.

Heimann states that the real problem in dermatology is not to label a skin disease, but to discover all the conditions that may produce a certain picture, and then determine in a given instance the responsible one. Without ability to do this, therapy, the object of all medicine, will remain empirical. Disturbed nitrogen and sugar metabolism, endocrinous gland and alimentary diseases, focal infection and food sensitization bear apparently some relation to the etiology of certain cutaneous diseases. Although certain diseases seem to be caused by definite general disturbances, like psoriasis from faulty nitrogen metabolism, seborrhea from carbohydrate fermentation and urticaria from food sensitization, yet there may be other factors operative in producing these conditions. It is emphasized that the attempt should be made to classify the causes underlying the processes, rather than complacently to classify the effects.

SYPHILIS. THOMAS M. PAUL, p. 137.

A description of the author's procedure in the treatment of syphilis.

If spirochetes are not found in the secretions of a suspected initial lesion, an intravenous injection of arsphenamin (salvarsan), 0.6 gm., is given as a therapeutic test. A partial or complete healing of the lesion warrants the further administration of antisyphilitic remedies.

BOSTON MEDICAL AND SURGICAL JOURNAL

(*Dec. 20, 1917, 177, No. 25*)

Abstracted by OSCAR L. LEVIN, M.D.

ANTHRAX AS AN OCCUPATIONAL DISEASE IN MASSACHUSETTS. THOMAS F. HARRINGTON, p. 867.

Corresponding with the increase in import of hides, skins, wool and other animal products that formerly went to Europe, there has been an increase in the occurrence of anthrax. In Massachusetts there has been an increase in the number of cases of human anthrax from four in 1914 to twenty-seven during 1915-1916 and forty-six in 1917 prior to November 1.

ROENTGEN-RAY THERAPY IN TINEA TONSURANS. ARTHUR R. PILLSBURY, p. 880.

Excellent results were obtained in twenty cases of ringworm of the scalp by the fractional dose method of treatment. No appreciable epilation was observed but, on the contrary, the hairs became more firmly rooted and approached the normal. It was also observed that the number of spores in the hairs lessened with each treatment.

Book Review

NEUROSYPHILIS. By E. E. Southard, M.D., and H. C. Solomon, M.D. 496 pages. Introduction by James J. Putnam. *William Leonard, Boston,* 1917.

There are several matters to be considered in reviewing a medical work. Of these the most important is whether the book has fulfilled its pretensions. Undoubtedly that of Southard and Solomon in the main has. The volume is one of a series devoted to case reports, and without doubt the cases reported in neurosyphilis have been wisely and thoughtfully selected from a rich and extensive material. The judgment displayed, the points covered, the simplicity of the exposition, the comprehensiveness with which variations in the disease and its treatment have been presented, are all commendable. Insofar as an assembly of case reports is valuable, this book is remarkable.

One may be justified, however, in speculating on the value of an uncorrelated collection of clinical protocols. This must have been sensed by the authors, for to a certain extent they have attempted to produce a synthesis by the use of captions and by a very ingenious key coordinating the individual elements. The attempt has been only partly successful, for only relative instead of total order has been procured from the chaos inevitable in stringing together anecdotes.

It is clearer and more forceful to state deductions and illustrate by example rather than to expect the unrelated text of numerous parables properly and automatically to arrange themselves. The book, the authors state, has been especially designed for the needs of general practitioners. It is especially this class of physicians, however, that demands the clearest, simplest and briefest presentation of matter, for they are too busy to do their own classifying and deduction.

There are few case reports in the volume that are not from two to four times longer than necessary. Case 54, chosen at random, will illustrate. The report covers two and one-half pages. It begins, "Julius Kantor was a shoemaker of 35 years who came to the hospital for treatment because his family physician had found a positive WR. in Kantor's blood serum." This sentence contains twenty-eight words. It might have read, "Julius Kantor, a 35 year old cobbler, entered the hospital because his blood showed the presence of syphilis." This sentence contains eighteen words. The rest of the paragraph stated redundantly that Kantor had evidences of tuberculosis and had had a chancre nine years before; about eighty words are required to express what was conveyed above in a sentence. For instance, it is stated, "The enterprising family physician had found the positive WR. in the first days of his treatment for tuberculosis." This genial and diffuse style suggests the early Victorian period in English letters when authors were remunerated for their prolixity. Nor is it flattering to the physicians of Massachusetts to have one singled out as astute for accomplishing what is to be expected of any practitioner if he deserves his license.

The gist of the work, when one has succeeded in freeing it from its obscuring elements, is excellent. The authors approach their subject as syphilographers as well as neurologists and alienists—indeed, a rare combination. This should commend the book to those of us who have become weary of the narrow and academic jealousy with which neurologists have viewed as unwarranted invaders those who have tried to illuminate an obscure passage in medicine. Nothing that has been offered in the field of neurology by syphilographers

has been welcomed by the hereditary aristocrats, and it is wholesome and gratifying to see how the authors have employed everything that would further a sound understanding of neurosyphilis.

They are not among those who flout subdural therapy. Neither are they extravagant in its praise. On the other hand, they are not partisans to any other therapy. They have been remarkably successful in their treatment and one is convinced that this is the result of carefully adopting therapeutic management to individual needs. Their deep knowledge of the indications is due in turn to a strong foundation of pathology. Thus the essentials of the work compel unqualified approval.

One may be pardoned for preferring a worthy gem in a worthy setting. The appearance of the book is rather tawdry and the illustrations are cheap. The quotations from "Paradise Lost" strike a discordant note. This, of course, is a matter of taste, but it seems artificial and sophomoric to resort to poetry in a work of this sort in order to emphasize the dramatic features of the disease. This objection rests on things that are felt and cannot be proved, but it is a critic's privilege, and must be forgiven as such, to indicate what appear as imperfections in a book.

Another flaw is the dedication, "To Massachusetts, a state that both tolerates and fosters research." This inscription might as well have been addressed to the United States or to the world. It would have been as true in each instance. In fact, it gives an impression that the authors could scarcely have cared to convey, namely, that the noble old commonwealth had at last aroused itself to the value of something that elsewhere has long been accepted both as an essential and as a commonplace. It is a century and a half since the Boston Tea Party and since then much has happened in our country, including progress in medical research, of which we may be proud. There is a certain pathos, perhaps, in the confession that Massachusetts has so late come abreast of the rest of the country. W. J. H.

Necrologic

MEYER L. HEIDINGSFELD, M.D.

It is with profound sorrow that we inform our readers of the death of DR. MEYER L. HEIDINGSFELD, of Cincinnati, who expired in the Jewish Hospital in that city, on Sept. 3, 1918, as a direct result of a splenic abscess which was a sequel to a severe attack of typhoid fever.

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